Lecture
ON
NATIONAL HEALTH.

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I.—THE FOUNDATIONS OF NATIONAL HEALTH.

No subject has received more impulse in this country within the last twenty-five years than that of the Prevention of Disease. We are ripe for comprehensive legislation. Mr. Goschen, taking a wide view of the question, has already embodied in a Bill provisions by which the relations of a large proportion of the medical profession to the public may be changed, and a new conception of the functions of medical men may be introduced into every corner of the country.

Though the exigencies of political affairs have compelled the withdrawal of this Bill for the moment, I shall endeavour, in the observations which I am about to make, to sketch the intricate bearings of a subject of no small moment, from the point which seems to offer the fullest conception of the groundwork of National Health. But I admit the all but impossibility of the task within the limits assigned to an ordinary lecture.

If there be a National Health as distinguished from personal health, it is a problem of the last importance to know by what laws the standard of national health is raised, by what it is depressed. If national health is intimately connected with national virtue, and both with national prosperity,—if all have their foundations in the very conditions of human life on the earth,—then it will seem probable that national vice will be found linked with physical weakness and general decline by the same correlative necessity.

These laws of our being are the expression of the fact, that nations, like individuals, placed in given conditions, must act within certain limits, limits admitted by all, whether they believe them to be bounded by the possible combinations of chance, or assigned by the intelligence of a Superior Will. National habits, good or bad,—national licence and national self-restraint,—national vice and national piety,—national vigour or national indolence,—are propagated through the individuals of which the nation is composed; being attached to individual character, and handed on from generation to generation, modified, however, by individual education, or those great catastrophes which, like subsoiling in a barren land, bring about fresh combinations, and give birth to products good or bad, better or worse, as the laws, moral and physical, which regulate the combination, may compel.

It may be alleged against these fundamental conceptions that National Health is a fiction of the mind, that no such collective physical condition exists. The objection would be one of words. Family constitution and hereditary taint certainly exist; and a multitude of individuals forming one army may, by the operation of moral causes, go anywhere and do anything, or may be without power, without will, without hope.

We must not stop to discuss in full by what subtle links families are bound into peoples, peoples into races; but, limiting our view to our own immediate nation, which may serve as an instance for all, consider briefly *how the physical condition of our people has been attained?* and *by what means it may be preserved or improved?* our National Health, in short, *What is it?* and, *What are the duties of the State towards it?*

The health of an individual is, the balanced condition of organs best fitted for due performance of the functions of body and mind within the capacity of the individual.

The National Health is, that condition of the individuals of the nation which enables the individuals of the nation to discharge rightly their respective functions in the State, "to do their duty in the state of life to which they are called;" the statesman to be in training for exercising the complex intellectual operations of his high office; the artisan, the soldier, the abstract thinker, each for his; and if we regard the philosophic teaching of the great author of the "Republic," parents of either sex, for the raising of the future citizens for the State.*

The sole question which here seems open to cavil is, How far we can influence national health in the wide sense just hinted at? Can the abstract speculations of the "Republic" bear practical fruit? Can we influence all the factors which are contained in the elements of national health? Let us see what they are.

Take any given Englishman. What is his descent—Roman, Norman, Saxon, Dane, French? What influences have operated on him since his progenitors were among the number of workers in flint or in bone or bronze? Did they become farmers, warriors, chiefs?—intellectually accustomed to command or to obey? physically to endure or to shrink? morally thrifty, contented, peaceful, or turbulent drunkards and dissolute? Were they in later times exposed to the diseases of hot climates? Were any syphilitic? Did they intermarry in close relationships, or seek far a-field the partners of their lives? What would be the qualities which, like the now famous black bar of the rock pigeon, might reappear on their 'scutcheons?—pride, pugnacity, syphilis, gout, phthisis? Terrible questions these which the third and fourth generations ask of the sins of their forefathers and of their own. There is much to be said for the squire who never passed the picture of his great-grandfather but he shook his stick at him with an oath, and said, "Your drink brought gout down upon us all." †

Philosophically, indeed, this most anxious inquiry might, we now know, be pursued, and is being with rare practical discernment pursued, into the very origin of our race. But I forbear, in a question of great practical import, to do more than remark that Darwin's discussion has a direct bearing on the conception of national health. It tends to confirm the conviction that acquired habits, whether of body or mind, may be very permanent in a race. That acquired increments for good may be permanent for good we cannot doubt, with the qualification that they must be maintained by each individual of each generation. The potential good being inherited may, by moral or physical struggle, be retained, and the potential evil be to some extent eradicated. But in every case we must believe that the inherited good attained, perhaps by generations of valour or virtue, may be in a moment shattered like some lovely work of fictile art that was produced only after years of education and months of applied skill.

These general reflections bear mainly on bodily characters; but not wholly so. A woof of mind runs through the web of all animal organisation; and the view we take of the elements of national health is coloured by our conception of the respective relations of body and spirit. When we look abroad on the animal world, we perceive such union of mental and bodily functions, that we are at a loss to say whether the matter of which the organism is composed, and by which alone the mental qualities which it possesses can operate in the world, is primarily set in motion by mind, or is itself the *primum mobile*—the basis and very essence of mind. The difficulty of solving this question, so fundamental to all speculation on the organised world, has increased with time; and so the principles on which the education of man shall be conducted have become a subject of yet keener debate. He who believes that we are but what we see, and handle, and measure, and weigh; he who looks not beyond the present chemical concurrence of some half-hundred elements, combined within themselves; and he who says in his heart "There is no God"; all these can look on education and on health as problems only of physical science, to be settled by material measures. But without pursuing a subject far too long for our present opportunity, let it be said this hard material view, which has once and again cropped up in history since culture and literature began, cannot be accepted as other than an hypothesis for settling the insoluble problem of the nature of

* The Republic of Plato, book iv.

† The Chinese have very strict notions as to hereditary taint; chiefly, however, on moral grounds. The children of *actors*, among others, for three generations are excluded from the greatest privileges of citizenship, and capital punishments may follow unlawful attempts to exercise them. Not long since, thirty examiners, including an ex-chancellor, were put to death for admitting an actor to a competitive examination!

man and his co-tenants of our planet. Look out and see every spot of earth, of water, of air occupied by beings fitted, if you will, for their place by natural selection; adorned, if you please, by the sexual impulse to display; and what do you find? Material organism fitted to perform certain material functions; bundles of mental powers fitted to put that adapted machinery in operation. Machinery and mind are alike inherited; their qualities improvable, and transmitted; the temper, so to say, of progenitors lost, and reappearing. Shall anyone presume to say that as yet the genesis or pangenesis of this complicated organisation of earth is so known to him, that he can declare that matter alone rules mind, and that mind, whence it is, and what it is, is so understood by him, that he can say it does not and cannot exist alone, does not and cannot act upon what we call matter, can have no independent being. Does the denizen of air, of water, of earth, who is ferocious, attack ferociously solely because his weapons make him desire to attack? Does he who flees and is timid, flee because his limbs impel him to dive, or to burrow, or to run away? Do you not think he flees for that he is timid, or fights for that he is ferocious? Have his bundle of mental qualities no real existence? Hopeless questions!

If we cannot, with Malebranche, assert that, in an understood and understandable manner, "God is in all things, and all things in God," we, at all events, cannot, as scientific men, allow that it is proved that blind chance has made us; and may on this safely appeal to the unprejudiced witness of Darwin, who shows, by hundreds of instances, the coercive powers of purpose. Moreover, by whatever road man has reached his present state, freedom of action, moral responsibility, are his; and now, at all events, he possesses the will and the reason by which he is mainly distinguished from the varied animal world about him. Throughout the animal world we find skill and power, as in the ant, in the dog, in the tiger; but skill and power little, if ever, improved, because the reason to mould the conditions of existence, and compel nature to be their servant, is absent, or applicable only to single instances. With man, on the contrary, with educated, moral, and progressive man, the skill and the power are becoming evidently correlative with the powers which are locked up in nature, and are attainable by him; and they are, on the whole, transmitted unlost from generation to generation.

Slight and imperfect as is this sketch of the relations of man, in his bodily and his spiritual nature, to the world in which he is placed, the thoughts to which it invites must be present to us, if we are to take a true survey of the ground of national health.

The conclusion to which they point is this: that the soul of man is not the abject slave of mechanical organisation; that, in some way which science cannot at present ascertain, it acts on, as well as is acted upon by, the physical structure through which alone it here exists; and that the groundwork of sound national health lies as much in mental as in physical training and guidance. Thus a task of the highest importance is imposed on the profession of medicine. They and they only can be at present expected to be able to measure fairly the strain which the nervous system of the human animal at various ages can bear; they and they only can say what bodily training may be most conducive to mental development and mental activity. But the problem involves questions far beyond the reach of average men worn by the strife of daily life. Philosophers and poets have spent some of their greatest efforts on this subject. Milton and Locke in their essays on Education, Rousseau in his "Emile," Herbert Spencer in his treatises, and a host of minor thinkers in theirs, have endeavoured to grapple with the question of the relation between mental and bodily discipline, and, viewing the question from the psychological side, have insisted on guiding the development of the body in order to furnish a fit organism for the mind. A caution must be entered, as public opinion heaves to and fro, lest the physician lay too much stress on material agency, and claim too much value for mechanical appliances in aiding the public health. The union of moral with intellectual and physical health (if indeed they can be separated) can alone save a people entered on the struggle of so-called civilisation. True, indeed, is it that without good sewers and healthy dwellings the poor can neither labour well nor reasonably enjoy their being; but as true that without a pure state of the moral sentiments no material improvements will insure to a people present happiness or permanent stability. Material comfort and material luxury are apt to engender, even in a noble race, meanness of soul, and woe and destruction wait on its fall.

Physicians, therefore, in discussing the grounds of National Health, must compass the whole bearings of this question, if they wish to be followed by a sagacious and toiling people. A large-minded promoter of sanitary measures says, in a letter to the people of India, "There is so constant a relation between the health of a people and their social civilisation, that, alas! one of the best indications of the social state of populations is afforded by the number who die year by year."* The education of the younger portion of the people in this country is proceeding so rapidly, and the knowledge and conception of material laws (thanks to a periodical literature, which is, on the whole, noble and enlightened) is becoming so much enlarged, that no health measures which are deficient either by reason of inattention to material wants or of inattention to moral and intellectual aspirations, or based on the old views of medicine as a purely curative as distinguished from a preventive art, will find public acceptance. To prove this it is sufficient to note the growth of resolute conviction among the people with respect to the abuse of alcohol, and with regard to the necessity of great engineering works for sanitary purposes, such as those carried out in Lancashire under the Poor-law Board during the cotton famine.

Shortly after the existing Poor Law had come into operation in England, a noble controversy arose in Scotland between Chalmers and William Alison as to whether the care of the sick poor and of the destitute should be left to the voluntary exertions of the charitable or be placed under the strict eye of the law. The two men were equals in Christian goodness and philanthropy; their experience and their knowledge of the poor were the same. But the science and logic of Alison prevailed. He showed, once for all, that, whatever might have been the evils engendered in England by the Poor Law, the evils of destitution left to charity were greater both to the nation and to the individuals.

The ideas of legal claims to relief on the part of the destitute and to cure on the part of the sick are so familar to this generation, that the early contest against the establishment of these ideas can now be scarcely credited. We are fast reaching a further social conception, that *prevention* of sickness is a yet more rational course, and therefore a yet more sacred duty than its *cure*. But the nation requires further familiarity with the proposition before it will accept it; and that familiarity cannot come until the community at large, as well as the medical profession, have fully realised the obvious proposition, that *prevention* of all disease that is not surgical, and of much disease that is surgical, is as strictly a department of medicine as *treatment*. They appreciate this in vaccination and small-pox. They do not appreciate the efforts of the younger labourers who are striving to discover new protection against other scourges of man.

But no medical knowledge, no sanitary provisions, and no sanitary legislation, can make head against laws of nature, physical or moral. If population increases beyond the means of healthy subsistence, disaster must follow. It seems to me that at present sufficient attention is not paid by sanitary writers to the fundamental truths advanced by Malthus, but often overlooked or misunderstood. While we have been honestly endeavouring for the last twenty-five years to abate the general torpor and selfishness of the previous century, and to stop the growth of further sanitary evils, the average mind of England has not sufficiently heeded the coming, nay the present, difficulties of over-population. We are too apt to look on the East of London, or the growth of the manufacturing towns, as exceptional instances. They are the necessary consequences of unthriftiness in marriage, of limited area, of difficulty in emigration, and of working and trading for the world.

The reality of our difficulty about population is told in a very few words. England and Wales are increasing by about 200,000 annually. This number will of course increase by a small increment. Since A.D. 1810 the population, which was 10,000,000, has become 22,000,000; and at the same rate will become by A.D. 1920 over 45,000,000.

* Miss Nightingale: remarkable letter to the Bengal Social Science Association. See Report on Improvements in India, 1870, p. 290.

The acres in England and Wales are about 37,325,000, including waste ground. There are now, therefore, nearly two acres per man; there will be in fifty years not one; in Glasgow there are already 94 inhabitants to an acre, and in Liverpool 103. No single arrangement can meet the necessities, therefore, of every district. The urban and rural districts have each respectively their sanitary difficulties. The land question presses in one shape in the towns, in another in the country. Here, as in America, or in every manufacturing country, causes suddenly operate to convert rural into urban lands; and to import into wholly unprepared country districts all the troubles of an urban population. Of this a striking instance is seen in the coal districts of Durham and Northumberland, many more in Lancashire and Yorkshire.

The danger of all these circumstances in relation to national health is admirably stated by Professor Fawcett: "It will, therefore, be well distinctly to appreciate what is implied in bringing into operation causes which will produce greater mortality; some definite idea may be formed on the subject by considering the results involved in the present high death-rate prevailing amongst the children of the poor. Assume that there are 1000 of these children, and 500 of them die before the age of five; whereas if they were as well cared for as the children of more wealthy parents, only 200 of them would die before this age. The death, therefore, of 300 is to be traced to defects in our social and economic condition. These children are literally slaughtered, and in a manner, moreover, which indicates prolonged suffering. But this is only a part, and perhaps the smaller part, of the mischief which is done; the causes which produce this excessive mortality do not alone affect the children who die; all those who survive are also brought under the same blighting influence. Consequently, to all the struggle for existence becomes more severe; the more weakly succumb; even the stronger who survive, in passing through the trying ordeal, often contract the germs of future disease, their constitutions being in too many cases undermined. Physical deterioration ensues, and a whole people may thus become gradually stunted and enfeebled."*

It is not possible to reflect on this subject without recognising the truth of the proposition that, making every allowance for the action of counteracting causes, excessive development of a population on a limited area like Great Britain must in the end be disastrous to the nation, unless, first, the population can be kept healthy, and, secondly, the commodities of life are obtainable to a commensurate extent. The arithmetical bearings of this point have been worked out by Mr. Samuel Ruggles in a Report to the President of the United States.†

The conclusion, then, seems almost forced upon us, that whenever our population increases beyond the power of our area to maintain it, two effects will follow, more especially in times of commotion—increased pauperism and increased disease among the adults. If philanthropic or legislative efforts succeed, there will be added the rearing of wretched children, incapable in body and mind; multiplication of lunatic asylums, reformatories, and workhouse schools, and crushing taxation of the industrious, capable, and healthy.

Conversely, if the preventive checks of Malthus, and especially education (in which I place first moral culture, however attained), can be brought into operation, two results might be expected—first, that the population may be kept in some check; and, secondly, that the internal administration of the country may be greatly improved by the political sense of the masses. Through these two causes there may be hope for the nation. It is doubtless true, first, that in the history of the world we have seen nations almost brought to a stand by epidemics, as, for instance, in various parts of Europe during the fourteenth century by the astonishing ravages of Black Death; secondly, some check is induced by wars; and, thirdly, an excessive mortality of children produces the same results. The operation of these natural checks is eminently uncertain, and to count upon them as substitutes for self-control, prudence in marriage, and good political administration, is deliberately to substitute the instinctive life of brutes or savages for the progressive experience, the reason and morality of the human race, and to accept the destiny which such a life brings with it. When savages and brutes meet in conflict with civilised men that destiny has usually been extinction.

Moreover, whatever difference of opinion there may be at present as to the origin, first of species, and secondarily of race, constitution, and individual temperament, there can be none as to the effect of food, climate, habits of life, and culture, either upon the individual or the progeny. It is sufficient here to remark on the feebleness of the descendants of Europeans in India, notwithstanding the vigour of the first generation, and on the rapidity with which the Anglo-Saxon race has changed in North America. Doubtless the limits of variation of man, or of any race of men, have not yet been determined; but we are rapidly approaching precise knowledge on the subject. Life insurance offices will ere long furnish a fund of information; and the labours of our great statisticians, when they include sickness returns from the public health authorities, will give all attainable scientific information of the causes and nature of health fluctuations in this country, in comparison with the same in other countries. To say truth, the accumulating knowledge of the facts of humanity is becoming more marvellous than the fancies of Utopia. The newspapers tell us weekly—thanks to the sagacity of Major Graham and of Dr. William Farr—the comparative death-rates of great towns not only in England, but on the continent of Europe, in India, and at New York. We are able to judge what the energy and determination of one man can do in controlling the health-destiny of vast populations, by studying the admirable results of the work of Dr. Hewlett* in Bombay, and the sanitary progress in Calcutta. India bids fair to set us an example of accomplished sanitary administration,† which will be fruitful alike of knowledge and of practical benefits to the people. Nor is this all. Quetelet‡ and Galton§ have opened a mine of precise knowledge regarding the finer causes of "limits of variation" which have been just touched upon. Quetelet, indeed, has proved what, *à priori*, might have been safely inferred, that the limits of the factors of human nature, whether mental or bodily, may be fairly expressed in terms of mathematical formula and curves; so that, indeed, the average proportion out of a given number of persons possessing any mental quality may be as directly predicated as their heights or their weights. It is true that this is only the expression of a fact which it does not explain. But Francis Galton has with great skill, in his work on Hereditary Genius, shown some of the consequences of this fact or law. They are startling. Just "as a cook combines or creates a dinner, the fish director can create," he says, "a particular sort of fish‖ according to a predetermined pattern"; then, he adds, "the reflections raised by what has been stated of fish are equally applicable to the life of man." "The entire human race, or any one of its varieties, may indefinitely increase its number by a system of early marriages, or it may wholly annihilate itself by the observance of celibacy. It may also introduce new human forms by means of the intermarriage of varieties, and of a change in the conditions of life." Galton's speculations—I ought rather to say his logical and precise discussion—should be carefully weighed by every thinker on public health, because, in one sense, it is directly opposed to the conclusions of Malthus. He has worked out the effects of early and late marriages in respect of progeny, and has shown that, given certain conditions to two races, M or N—one, M, marrying early, and N marrying late,—at the end of *one* century the mature men of M will be four times as numerous as those of N; at the end of two centuries, ten times; and at the end of three centuries, twenty-seven times as numerous. Now if M were reckless and imprudent, and N careful and prudent, all else being equal (which, however, would not be the case), the prudent race would be driven out of the field. A terrible disaster! "It may seem monstrous that the weak should be crowded out by the strong; but it is still more monstrous that the races best fitted to play their part on the stage of life should be crowded out by the incompetent, the ailing, and the desponding." In forming a fair estimate

* Professor Fawcett: "Pauperism, its Causes and Remedies," p. 108. London, 1871. A book which cannot be too widely read.

† See an abstract of his paper in *The Times*, May 17th, 1871. J. Lambert, Esq., C.B., has referred me to an interesting work on the condition of the poor by another Mr. Ruggles—viz., "The History of the Poor and the Laws respecting them," by Thomas Ruggles, Esq., 1797. The work contains many thoughts of permanent value.

* Dr. Hewlett's Quarterly Reports on Bombay.

† See various Reports on Health of India, for the last five years.

‡ Authropometrie de l'Homme, 1870; and Essai de Physique Sociale, edit. 2, 1869.

§ Hereditary Genius, 1869.

‖ Galton, "Hereditary Genius," 1869, p. 373.

of the whole of this question, many other causes would have to be considered, and their effects calculated. But reason tells us that there must be some relative value in lives, though the human eye may fail to count it right. There is a moral in the tale of the fowlers in the Northern Seas. As the three egg-hunters are, one by one, drawn up along the face of the cliff by the same rope, highest is fastened the lad, the father next, and last the grandsire. If the strain is over great, the lowest, least worth, is to cut the rope and fall into the abyss; next, if need be, the father; so that the chafing strands may perchance save that life which may be longest and is youngest. So is it in nature. We have our being under just and necessary laws, moulded by hidden causes we cannot see nor understand.

II.—HOW THE FOUNDATIONS ARE SAPPED.

Such being the general conception of the foundations of national health, it would at first seem to be an easy task to describe the causes which may sap them. It would be easy if dealing with a social *tabula rasa*. In an old country, however, growing with unprecedented rapidity on a limited area, the questions involved touch every point of political economy. Theories concerning population, religion, liberty, existing privileges, and natural rights, are to be met, accepted, or denied at every point. Ignorance and prejudice have to be dealt with among honest persons, and self-interest with the unpatriotic. The haste to be rich among the unwise, the intolerance among the cultivated of opinions counted narrow, and inadequate appreciation of the extent to which our world lies under law (binding even the seeming free agency of man), all check the progress of popular knowledge as to the foundation of national health. Take the single illustration of mills on streams. How long, after the effect of damp subsoil in injuring the health of the people has been proved, is it just to a population that one man should keep up mill-dams to such a height as to swell his profits by some small percentage, and destroy his neighbour's health, when other arrangements might, with little loss to him, at once abate the evil. It is an instance of a thousand. The millowner, it is true, would have claim to compensation for his prior rights, earlier occupancy, and interests hitherto permitted—nay, protected—by law. But the human race, and every civilised community, is essentially progressive, and no society ought to shrink from dealing with rights which have produced consequences essentially different from anything that could have been contemplated when they were allowed to grow up. One main duty of the present age of the world, and in this country urgent, is to strive to prepare for coming generations.

The foundations of the national health may be sapped in so many ways, that the catalogue is as long as it is dismal. Bad air, bad food, bad clothing, deficient fuel, too long hours of work, intemperance, all excesses, excessive exercise, excessive study, fanaticism, gluttony, idleness, late hours, intermarriage among unfit persons, depressing passions, as gambling, whether in hells or on the stock market, overcrowding and bad lodgings, bad dwellings, or dwellings on unfit sites, all engender disease, and deteriorate the race. They produce struma, rickets, gout, hypochondriasis, and many other diseases, with consequent loss of power, imperfect work, moroseness, and misery to others besides those affected, in an ever-expanding circle.

Again, bad water produces not only actual *fatal* disease in individuals, but short of that, as was stated at length and with much acuteness long since by Hippocrates (in his treatise on "Air, Water, and Places"), engenders continuous feeble health, when acting either with or without the other causes above-named. These various mischief-bringing elements in the "pangenetic" structure of society may act either on a single person, or on the masses. Some act on the poor, some on the rich, some equally on both. Time forbids me to analyse or extend the list, and show the precise way in which each member of the ghastly catalogue acts on the human constitution. I will only add one instance quoted by me elsewhere. A girl, having been seduced, entered a workhouse. A female child was born. She was brought up in the union, and was there at school till nearly of age. She went out, straightway became first a prostitute, then syphilitic; returned to the workhouse, and brought forth a syphilitic infant, to be reared, like her mother, with difficulty. There she lives in misery, and may perhaps repeat the dismal tragedy of her grandparent and of her parent, at the cost of the nation.

But are we sure that the needless waste of the higher kind of life is not in other ways as reckless and as pitiful? I do not speak of death by war, or by avoidable accidents, of mad races against time by sea, or of wholly unnecessary speed by rail, though these imply mischievous wear and tear to individuals and to classes of men; but I allude to useless wear and tear of health imposed on public men, and the waste thereby of power valuable to the nation.

For instance, the House of Commons contains within it the picked executive of a free people, who have deliberately selected them from the whole nation for the decision of the greatest problems of the national life. Yet custom will allow that Ministers thus carefully selected for their special aptitude to do the finest work, are often occupied half the night through on formal and unimportant discussions. They thus have useless pressure put on them which none but the most robust can bear, and their health fails perhaps at the moment of their highest administrative perfection.

The buildings which public men occupy are often far less calculated for maintaining health than they might be; and, trifling as may seem the remark, it is to be doubted if they can always obtain with readiness food suited to the necessity of exhausted nerve-power. There can be no doubt that actual illnesses are often brought on from these avoidable causes.

We cannot, however, now consider all the ways in which the habits or the pressure of civilised life needlessly tend to waste the force and crush the physical elasticity of the people. Instances of various kinds will occur to every mind. Let these, from the two extremes of the social scale, suffice for illustration. Rather let us here seek if means of prevention may be found such as will pervade the whole framework of the national life.

(To be concluded.)

NOTES FOR A

Clinical Lecture

ON

DISSECTION POISONS.

By JAMES PAGET, D.C.L., F.R.S.,

CONSULTING SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

(Concluded from page 736.)

THUS, then, I was prepared for receiving injury, and the injury was supplied in some material of this dead body. And I would repeat that this material was probably something special enough to be called a virus or poison; for although any decomposing organic matter may in some persons give rise to the worst forms of blood-poisoning, yet I have no reason to think they would have done so in me. Not a day has passed for many months without my hands being in contact with pus and other decaying or decomposing organic matters; yet none of these poisoned me, though I was often enough as much fatigued as when I fell ill.

I wish that I could tell exactly all the signs of illness that I so anxiously watched; but during acute disease one cannot record, and after recovery one cannot well remember, the daily progress of a case. I can only tell the general consequences of this poisoning.

The first thing observed was a few small pustules on the hands, very trivial-looking things, which appeared on the day after the examination, and in the next week or ten days dried without discharging or causing any local trouble. I think they were only local effects of the simply irritant fluids of the body, or of the carbolic acid oil, with which I had uselessly though thoroughly rubbed my hands before beginning my part of the examination. I see no reason for supposing that the material which poisoned me was from any of these pustules.

The first sign of the general poisoning was (as I have

said) the pain in the axillary lymph-glands. No lymph-vessels could be seen or felt up the arm at any time; the absorbed material traversed them, but did not irritate them; but the glands enlarged, and became painful to a degree far surpassing the swelling or any other sign of inflammation in them. I do not know whether this exceeding painfulness was due to something in the poison, or was dependent on some peculiarity in my nervous system. I have seen it in one other case of poisoned wound, in which, as in mine, it indicated no great severity of inflammation in the glands. With me it slowly diminished, but did not quite cease till I was nearly well again, although no considerable morbid changes took place in the glands. They were painful; nothing else.

Next after this affection of the axillary lymph-glands came widespread inflammation of cellular tissue. But before saying more of this I ought to tell what may have had some influence in determining the course of my case—namely, that my axillary glands were already damaged, and may have been less penetrable by fluid than they should be. More than thirty years ago, when I was a student, I was infected while dissecting (I had not yet acquired the immunity which I afterwards gained and lost); and this infection was followed by one of the lesser and slower consequences of dissection-injuries, the suppuration of lymph-glands. At that time my left axillary glands slowly suppurated, and, after discharging for many weeks, healed with a deep scar, and shrivelling and partial calcification. Thus damaged they may have too much hindered the course of the absorbed fluid; but I doubt their doing so, for I have never been conscious of any obstruction in them; and in other cases of patients with healthy lymph-glands the same inflammation of cellular tissue as I had occurs.

This inflammation, which became evident four or five days after the infection, extended quickly from the axilla up the left side of my neck, over and below the clavicle, and down the back nearly as far as the ilium. Observe the range within which the inflammation was limited, for in this, as in other cases, it was in the range of lymphatics connected directly, or not far from directly, with the lymph-glands first affected. A frequent site for such cellular inflammation is down the side of the chest, or over or beneath the pectoral muscles. Thus it was with Mr. Bloxam, who was poisoned about a fortnight after me, and in whom acute pleurisy with effusion occurred on the same side. But, so far as I know, cases do not occur of similar inflammation on the opposite side, or separated far from the lymph-glands corresponding with the poisoned part, unless it be at a later period of illness, when pyæmia is established. This seems to be a point of distinction between these dissection-poisonings and pyæmia; their effects are at first, however severe, comparatively limited to the part poisoned, and to the lymphatic vessels and glands, or to the cellular tissue, nearly in relation with it. They may lead to pyæmia, but they do this only by secondary changes, or, as it were, by some accident.

The range of cellular inflammations in these cases, following as they do on the affection of the axillary glands, seems to indicate that they are due to arrest of lymph in the affected parts, and to its being poisoned by reflux from the glands. Thus poisoned it would at once infect the cellular tissue in contact or close proximity, and hence would be derived the spreading inflammation, much like phlegmonous erysipelas, with sloughing or diffuse suppuration.

In my case the inflammation, at first widely diffused, gradually concentrated its effects in two places—first at the back, nearly over the angle of the sixth rib, where suppuration was evident about a fortnight after the first appearance of the swelling, and, about a week later, under the edge of the trapezius, just above the level of the clavicle. Both these abscesses were freely opened. The first was seated in the deepest part of the subcutaneous cellular tissue, and the second under the cervical fascia. The first suppurated very freely; the second scantily. Both healed soundly in five or six weeks from the time of opening them.

The position of this second abscess deserves notice, for it was probably due in part to the old damage of the axillary glands, of which I have already spoken. It was such an abscess as might have pointed in the axilla, and I always felt as if it would do so, for hardness and pain could always be detected there. But it seemed as if the axillary tissues would not yield, and therefore the abscess extended upwards, above the apex of the axilla, to the subfascial tissue beneath the edge of the trapezius. Both these abscesses were opened early—that is, so soon as fluid was clearly discovered in them. And I felt the comfort and utility of this practice; for though they had given me very little pain, and had been soothed with poultices, yet they seemed to keep alive my fever, and especially before the pointing of the second I had chills and exhaustion, which were evidently remedied by its being opened. In the opening of it I enjoyed the safety which I have often conferred on others by the adoption of Mr. Hilton's plan. The abscess lay very deep, and was very small, under the edge of the muscle, and with integuments and cellular tissue so thickened over it that all the landmarks for incisions were lost, and the district was one in the depths of which a knife, however skilfully used, might have given me serious trouble. The director penetrated the abscess safely, and the forceps sufficiently dilated the opening, and I had self-evidence on which to urge you to use Mr. Hilton's plan in all operations on abscesses in dangerous regions.

After the opening of the abscesses the infiltration of the cellular tissue about them cleared up slowly, very slowly; and, more than once, patches of thick œdema appeared over the left ilium as if suppuration would take place there; and when erysipelas came on there was much more than usual œdema with it, as if there were still some hindrance to the free movement of the lymph.

The general illness that attended these suppurations was not severe. When it was evident that abscesses would form—that is, a fortnight after infection,—I was sent to Norwood, and, with the fresh air and quiet of the place, I gained strength, and could eat and drink well, and digest pretty well, and seemed floating into convalescence. But just before the evident suppuration of the second abscess, I had chills every day, and after them heat; and with these great loss of power and general distress—distress so keen that it seems hardly possible that I should now be unable to describe it, or even clearly to remember it.

This general illness, this constitutional disturbance, was, I believe, the beginning of erysipelas. But before speaking of this, let me tell that the pus from my abscess appeared to have irritant properties above those of ordinary pus. For my childrens' nurse, who made and put on my poultices, pricked her finger; and this was followed by very acute inflammation and suppuration, extending from the puncture over all the hand and forearm. The same thing happened, through a similar accident, to Mr. Bloxam's nurse, one who was habituated to pus of all ordinary kinds, and had not suffered from them.

Of the erysipelas that affected me after these abscesses, beginning about a month from the time of infection, I need not say much; for it had no remarkable feature, unless it were in the degree of subcutaneous œdema which predominated over the inflammation of the skin and remained very long. Beginning near the wound in the neck, the erysipelas spread slowly over the chest and back, down the left arm, and over the nates and parts of the thighs. The eruption was much more extensive on the left side than on the right; it slowly cleared up, and after desquamation no trace of it remained, unless it be in a weakness of the minute blood-vessels of my arm; for even now, after my bath, the affected part of this arm appears dusky and mottled.

It was during the erysipelas that my general health suffered most; but my recollection is not clear about anything but the feelings of intolerable restlessness, which nothing but wine or morphia would tranquillise, and of the interest with which for many days I watched the progress of my own case, fancying myself an intelligent observer. At last, after the erysipelas had been extending for about ten days, and at the end of nearly six weeks from the infection, there came what seemed to me like a crisis. During the night in which my pulse and temperature were at their highest I had a profuse sweating and a profuse flow of urine, such as I never had in my life before; and next day my pulse and temperature had come down to what might be deemed safety-points, and I was conscious of returning health.

In the treatment that I received during the erysipelas, I am sure that quinine was very useful. I generally took three or four grains of the hydrochlorate three times a day, and it always (I think) lowered my pulse, and diminished

my restlessness and (I believe) my temperature. And I wish I could tell the comfort that morphia gave me—whether in bringing sleep, or in changing the unrest that always increased towards night into a happy and complacent wakefulness almost as refreshing as sleep. It was well that pleasure unnaturally obtained should have a penalty; and this was in the dryness of mouth, which seemed due to a total suspension of the secretion of saliva, and which became at last even less tolerable than restlessness. Locally, collodion, freely applied as soon as an erysipelatous redness appeared, gave great comfort. It did not hinder the spreading of the erysipelas; but it relieved the itching and heat of the eruption, and it prevented the horrid itching of the desquamation, which was intense, and renewed for many days on exposure to air, at every place to which the collodion was not applied. These things were certainly beneficial; but I suppose that those which most helped me to a safe passage through the illness were, a judicious moderate use of food and wine, and very wise and gentle nursing.

This erysipelas, it may be believed, was part of the effects of the poison of the dead body—an issue of the blood-poisoning. Not such, I think, was a pneumonia with which I suffered twice, and which added greatly to the risk and length of my illness. This was, probably, personal; due only indirectly, if at all, to the poison—due rather to a susceptibility of my lungs to the inflammatory process. For I have had acute pneumonia five times during the eighteen years before this illness. All these attacks have occurred after severe over-work, with deficient food, and exposure to cold; and the manner in which they have cleared off, leaving my lungs unimpaired in structure, has made it nearly certain that they were rheumatic or gouty. But, however this may be, the pneumonia, of which one attack commenced only two days after the infection, and the other a week after the disappearance of the erysipelas, must be ascribed to me rather than to the poison. They passed through their usual course, and left my lungs sound again; but I ask your attention to them as an illustration of one of the ways in which a specific disease may be complicated or modified by the personal constitution of the patient. Here was an instance of what one may call a specific poisoning; and one of the first things following it was pneumonia. Associated as this was with evidence of poison in the lymph-glands, it might have been thought pyæmial, or in some way due to the specific poison in the blood. Yet it was only such a pneumonia as I might have had without having been poisoned, or such as might occur in me in any feverish illness from whatever source.

Keep such facts as this in mind. They show that there is no disease so specific but that its signs may be confused or complicated with the things that are peculiar to the patient. Syphilis is a specific disease as sharply defined as any, but its course and appearance in a scrofulous man and in a gouty one are very different. Vaccination produces a well-marked specific disease; but in one patient it may be followed by inflammation of lymphatics, in another by eczema, in another by anything you please: but all these are due in only a minor degree to the vaccination; they come out from the personal constitutions of the several patients disturbed by the vaccination, as they might have been by anything else producing some slight fever.

This is not a mere question of doctrinal pathology. It is among the first necessities for success in practice that, in the total phenomena of a disease observed in any patient, you should be able to estimate what belongs to the disease and what to the man. A farmer may as well expect success if he sows his fields without regard to their soils or to the weeds that may of themselves come up in them, as one of us may expect it if we treat diseases without exactly studying the constitutions of those in whom they occur.

Thus I have given a sketch of my three months' illness, and some of the thoughts which it suggested to me. But I ought to say that my case showed only one of many forms of disease that may be produced by the poisons of dead bodies. The suppuration of lymph-glands, which I had many years ago, is another. But besides such as these, you may find cases of trivial local inflammation; of direct and simple erysipelas; of spreading, suppurating, or sloughing inflammation of the cellular tissue of the hand and arm; of pyæmia; and of the fiercest septicæmia. And it is remarkable that different effects may be produced by the same poison acting on different persons. Mr. Erichsen mentions a case in which six students were infected by the same body: two had suppuration of the areolar tissue under the pectoral muscles and in the axilla; one, a kind of maniacal delirium; a fourth had typhoid fever; and the other two were seriously indisposed. I advise you to read-up the subject in his "Art and Science of Surgery." He has given an excellent account of it; and so has Billroth in his and v. Pitha's "Handbuch der Chirurgie."

Sir William Lawrence used to say that he had not known anyone recover on whose case more than seven had consulted. Our art has improved. I had the happiness of being attended by nine: Dr. Burrows, Sir William Jenner, Dr. Gull, Dr. Andrew, Dr. Gee, Mr. Cæsar Hawkins, Mr. Savory, Mr. Thomas Smith, and Mr. Karkeek. In this multitude of counsellors was safety. The gratitude I owe to them is more than I can tell—more than all the evidences of my esteem can ever prove.

ON GASTROTOMY;

WITH A CASE OF INTESTINAL OBSTRUCTION, IN WHICH THE OPERATION WAS FOLLOWED BY RELIEF OF THE SYMPTOMS AND CURE OF THE PATIENT.*

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"THE causes of intestinal obstruction are so various, its occurrence is fraught with so much danger, its symptoms are so severe and distressing, and its treatment so uncertain and so often unsuccessful, that it is with the greatest diffidence we undertake the consideration of such an important subject as the pathology and symptoms of intestinal obstructions, and the measures to be employed for their relief."

Such are the terms with which the accomplished writer on intestinal obstructions introduces the subject in Holmes's "System of Surgery"; and everyone who has seen examples of the affection in question will homologate his statements. It is my purpose in the following paper to make a few remarks on its varieties, and to relate a case in which all the symptoms were present in such severity as in my opinion to warrant the dreadful expedient of gastrotomy with the pleasing result of saving the patient's life.

The most systematic accounts that I can find on this subject are in Mr. Phillips's paper in the 31st volume of the "Medico-Chirurgical Transactions," Rokitansky's "Pathological Anatomy," Mr. Hinton's paper in the *Association Medical Journal* for 1855, the "Transactions of the Pathological Society," and Brinton's work on "Intestinal Obstruction," along with the synopses of these articles in the various systems of surgery. From these and other authorities it appears that intestinal obstruction may arise from causes external to the intestinal tube, or from affections of it. And it is important, in investigating any case which may come before us, that we be aware of the various conditions which have been found to produce symptoms of obstruction.

Among the first class of cases are to be reckoned all forms of hernia of the internal kind, as obturator, schiatic, &c., and constrictions caused by the intestine being entangled by loops, bands, or old adhesions of the omentum, appendices epiploicæ, or other peritoneal folds.

The principal affections of the intestine itself which have been found in connexion with the symptoms referred to are—ileus, intussusception, and stricture of some part of the great intestine, including sharp twist of the sigmoid flexure of the colon.

In a third class of cases the symptoms have been produced by impaction of the colon with foreign matter, the most common being hardened fæces.

In looking over a great many of the reported cases I find that spontaneous relief has happened very rarely; those which have ended favourably having been principally examples of intussusception where the gangrenous portion of

* Read before the Glasgow Medico-Chirurgical Society.

intestine has been discharged from the bowels. Most of the other instances where cure has been effected have been those in which the operation of colotomy has been performed for obstruction in the great intestine.

Excluding these two classes of cases, it may be said that intestinal obstruction is very often a fatal affection except in those examples in which the obstruction is within reach of a bougie or rectum-tube. It comes then to be a very serious question at what time a surgeon is entitled to perform an operation with the view of exploring the abdominal cavity and endeavouring to ascertain the cause of the obstruction, and, if practicable, to relieve it. I wish here to exclude all reference to colotomy, as it is applicable only to cases where the obstacle is in the descending or sigmoid colon or rectum, and which presupposes a knowledge of the position of the affected part. I wish to direct attention to cases where the symptoms of intestinal obstruction are present, where there is no evidence of stricture or other contraction of the rectum or lower part of the great bowel, where remedies have failed to relieve, and where the progress in a downward direction is clearly going on. Are we, from the difficulty or impossibility of defining accurately or at all the true cause of the obstruction, to resign the patient without a chance, or are we entitled to perform a dangerous operation in the mere hope of affording relief? It has happened to myself to see the post-mortem examination of at least one case where the relief to the condition giving rise to the symptoms would have been attended with no difficulty; the danger of the operation would have arisen altogether from the exposure of the peritoneal cavity, and the exhaustion produced by the previous symptoms.

If our diagnosis could be rendered more clear, if we had any means of distinguishing cases of ileus from intussusception, internal hernia, strangulation by bands, and awkward twists of the intestinal tube, then we could with some probability of success choose out the suitable cases; but, unfortunately, it seems impossible to point out any well-marked line of demarcation, in the symptoms, between these very different conditions. Mr. Phillips, in the paper referred to, after relating an example of death from intestinal obstruction depending on each of the above-named pathological conditions, observes: "The impression which must be produced by reading the preceding cases is this, that, no matter what may be the cause of the obstruction, no certain remarkable difference is observed in the more prominent symptoms by which it is accompanied. There are, in all, abdominal pain, abdominal tension, obstinate constipation, and sickness; but in the mode of their occurrence it would be difficult to point out any distinct difference." Nevertheless the author referred to comes from the study of the whole subject to the following conclusion, with which, I presume, few will be found to disagree—namely: "That interference by surgical operation is justified when three or four days have passed without any relief from ordinary means, provided the constipation be complete and the vomiting of fæcal matter continue, because it affords a greater chance for the preservation of life than ordinary means."

"The conditions which justify this operation are, a sudden attack of pain, followed by desire to be relieved, but with no action of the bowels, and persistent vomiting; and if little or no tenderness on pressure should exist, constipation must be complete, and must have exceeded a period of twenty-four hours, in company with all the above symptoms. It must be borne in mind that the amount and character of the pain are very important symptoms in these cases. If the strangulating orifice happens to be very small, or the band very tightly applied over the bowel, so that strangulation shall be very complete in the onset of the symptoms, it will be marked by great suffering, irresistible vomiting, great anxiety and restlessness, and complete constipation. Under such circumstances delay in operation is dangerous. We cannot afford to wait, if we hope to secure ultimate relief; death will occur in three or four days if some attempt be not made to remove the cause of obstruction by opening the peritoneum." I have used these words of Mr. Pollock because I think the case could not be more clearly stated, and because they entirely coincide with my opinion and experience.

There is just one other point of a general kind to which I wish to allude—namely, that surgeons are not now so afraid to expose the cavity of the peritoneum as they were formerly. The experience of ovariotomy and the precautions which have been gradually introduced in connexion with that operation have rendered the treatment of wounds in the abdominal walls much more satisfactory than it used to be, and we need have no hesitation in performing gastrotomy so far as the wound of the peritoneum is concerned.

As I shall not revert to the operation again further than to relate that which I performed, I may here state that there is no tissue which affords a more perfect example of immediate union than the peritoneum. In closing wounds in the peritoneum the stitches are so applied that the surfaces of the peritoneum for a quarter of an inch from the edge of the wound are brought in contact, and the result is firm adhesion in an incredibly short time. I have seen the post-mortem examination of a case in which a wound in the peritoneum was made within twenty-four hours before death, and the peritoneal surfaces were found firmly united. This prevents any discharge from the more superficial part of the wound which sometimes occurs from entering the peritoneal cavity, and accounts in part for the success of the more recent peritoneal operations.

I shall now shortly relate the case which has called forth these preliminary remarks.

Mary K——, domestic servant, aged twenty-nine, a healthy, well-made woman, retired to bed on Feb. 17th in perfect health, after having taken supper, which consisted of bread-and-butter and porter. At 2 A.M. she was awakened by a severe pain over the region of the stomach; she felt all over stiff, and presently she vomited part of the contents of the stomach. The vomiting returned several times after brief remissions of ten or fifteen minutes, and was accompanied by severe pain in the abdomen. Her mistress, becoming alarmed, procured the assistance of Dr. M'Carron, who was in attendance by 3.30 A.M. He informs me that he found her still vomiting at intervals, complaining of the epigastric pain, which was of a spasmodic kind, shooting upwards to the right hypochondrium and towards the shoulder. On examination, Dr. M'Carron found tenderness on pressure above the umbilicus; pulse soft and compressible; tongue moist; no fever; and the breathing in the intervals of the spasms apparently normal. She lay on her left side for the convenience of vomiting, but she could lie also on the right side, and, except when the fits of pain and vomiting occurred, she could lie with her limbs stretched out. Her mistress informed Dr. M'Carron that she had frequently suffered from what seemed to be stomach ailments; and that her mother and sister had died from similar attacks—in the case of the sister, after an illness of only twenty-four hours. The patient was therefore not only in great suffering, but also in great alarm as to the result. To relieve the symptoms described, fomentations as hot as could be borne were assiduously applied, and a full dose of ether and laudanum was administered with the view of allaying the spasm. Under this treatment she enjoyed comparative ease for several hours. She had a little brandy once or twice, and in the morning some beef-tea in small quantities; but usually this brought back the spasms and vomiting. Ice, with and without brandy, was then given. On the night of the 18th, about twenty hours after the onset of the attack, a large injection of soap and tepid water was administered, which only excited the spasmodic pain, and was soon ejected without any feculent matter. An anodyne draught of ether and laudanum, though in most part rejected, was retained in sufficient quantity to give partial relief. During the 19th she continued in much the same state, vomiting at intervals, especially after she swallowed anything. She made several ineffectual attempts to relieve the bowels, but was able to pass water. On the evening of the 19th there was great tenderness of the abdomen, which condition seemed to extend to the extremities, for any movement was attended with great pain and the patient could not bear to be touched. Several doses of Dover's powder were given at intervals, but were uniformly vomited as soon as swallowed. To relieve the severe abdominal pain, a large fly blister was applied to the abdomen. The blister vesicated well, but without relieving the distress; and before 4 A.M. on the 20th, after much sickness, vomiting of stercoraceous matter began. During the day Dr. M'Carron, perceiving that matters were rapidly assuming a very grave aspect, suggested that I should be sent for; but the patient and her friends who had come to town, dreading the pro-

spect of an operation, which Dr. M'Carron told them might be the only thing left to be done, refused permission.

The stercoraceous vomiting continuing all night, and the patient being now greatly exhausted, I was sent for at 11 A.M. on the 21st, three days after the sudden onset of the attack. The patient was in the following state. When I arrived she was in the act of vomiting the contents of the intestine, which had a most offensive smell. It seemed to cause her great suffering, as she moaned continuously. Her voice was husky; her countenance anxious and pale; her extremities were cold; her pulse was weak; and she was restless and uneasy in whatever position she lay. The abdomen was distended with flatus; but the most careful examination that I could make failed to enable me to ascertain any point to which I could refer the seat of the obstruction. The copious injection given by Dr. M'Carron two days before, which had been easily introduced by a rectum-tube, seemed to show that the obstruction was not in the lower part of the great intestine; and the symptoms generally pointed rather to the small intestine than to any part of the colon.

It was clear to me and to Dr. M'Carron (who had most carefully watched all the symptoms from the very onset) that we had to do with a sudden obstruction of some part of the small bowel; that the symptoms were becoming rapidly worse; and that there was no prospect of any other than a fatal termination. We therefore explained the nature of the case to the patient's father, an intelligent man, who with his son had come to Glasgow to be of what service they could. We said that the only hope that remained was to open the abdomen in the chance of finding the cause of the obstruction, and, if it proved of a kind that admitted of relief, to afford that relief; that the operation did not give any more than a possibility of success, and that the result was so problematical that we could do little more than lay it before them; that they must consider it along with the patient (who was still quite sensible), and if they resolved to accept the possibility, I was quite ready to perform the operation; and that, as the patient had been hitherto a healthy young woman, we would urge them to allow us to have recourse to the only means now open to save life. The patient and her friends having consented, with the assistance of Dr. M'Carron, Mr. H. E. Clarke (my demonstrator), and Mr. M'Gregor (my house-surgeon), I proceeded to perform gastrotomy as follows:—

The patient having been put under the influence of ether, I made an incision about four inches in length from the umbilicus downwards, dividing the tissues in succession till I came to the peritoneum. This I then carefully slit on a director to the same extent. As soon as an opening was made in the peritoneum a quantity of turbid serum flowed out, which was collected in a glass vessel. As long as it continued to flow, the abdomen was gently pressed on; and there was collected about a pint of this fluid. It had very much the appearance of whey, with flocculi, like pieces of curd, floating in it. It was very acrid, smarting the skin when it came in contact with the hands. When most of the fluid had escaped, I held aside the lips of the incision to examine the abdominal contents. Just beneath the wound the small intestine was arranged in transverse folds, and was retained in that position by recent peritoneal adhesions. At one point it was turned so abruptly on itself as to convey the idea that here the calibre of the canal must be very narrow, if not altogether occluded; but there was no visible difference between the condition of the intestine above and that below the acute twist. Not being quite satisfied that the cause of the symptoms was in view, I introduced my right hand, and made a systematic exploration of the abdominal cavity. I first gently undid the peritoneal adhesions of the folds of bowel in view, and found that they could be separated without injury to their structure. I then commenced, as nearly as I could judge, at the upper end of the jejunum, and passed my hand over all the small intestines, pulling those lying in the pelvis with a slight jerk, in case there might be any pelvic hernia; but there seemed to be no adhesions other than those of the folds to each other, which were easily unraveled. The intestinal tube seemed to be pretty equally distended with flatus; and it required the hand of an assistant to keep the bowels from protruding from the abdominal cavity. The examination of the colon yielded equally negative results. I could discover no seat of stricture nor any bands or loops. It was also distended with flatus, but not to the same degree as the small intestine. Having failed to find any structure I could divide or otherwise interfere with, I judged it imprudent to continue the examination further; but before closing the wound I sponged out the pelvis in the way I have been in the habit of doing in ovarian operations when there is reason to believe that any blood or other fluid has escaped into the abdominal cavity—a precaution which I believe to have been attended with the most important results. By this means any of the acrid serum which may have remained in the pelvis was removed, and the peritoneum thus placed in the most favourable condition for recovery. The wound was closed by three deep and three superficial silver-wire sutures; the deep ones being passed through the abdominal walls half an inch from the edge of the incision in the skin and a quarter of an inch from the edge of the incision of the peritoneum, to insure immediate union of the peritoneal surfaces. The wound was covered with long broad strips of adhesive plaster, to prevent the movements of the abdomen interfering with the adhesion of the wound.

A hypodermic injection of morphia was given, and the patient was enjoined to abstain from all food, solid or fluid. A few drops of brandy were ordered to be given every two or three hours; and, to allay thirst, which had been excessive, the lips to be wetted with a bit of ice.

At 6 P.M. I visited the patient, along with Dr. M'Carron. To our surprise, she had been much relieved since the operation. No return of the vomiting; the abdominal pain and general distress much less urgent; pulse 120, soft; heat now returned to the extremities; thirst still urgent. To continue the drops of brandy and the ice; and to have an injection of sixty drops of laudanum, repeated during the night if necessary.

Feb. 22nd.—Had little sleep, but feels comfortable; pulse 110, soft; thirst moderate; no return of the vomiting. To have small quantities of beef-tea.—8 P.M.: Feels easy; has passed urine.

23rd.—This morning had a passage from the bowels, the dejecta being hard fæces with dark offensive liquid.—10 P.M.: Has had passage from the bowels twice since the morning, of the same character.

24th.—Continues favourable; no discharge from wound.

From this date, with occasional variations, the patient made a gradual recovery. The stitches were removed on the seventh day, and the deep part of the wound was found quite united; the edges of the skin being in some parts separated, probably from the incision having been made in the seat of vesication from the blister. But union soon occurred throughout. Considerable trouble was experienced in getting her to take food, chiefly from the pain she felt in chewing or swallowing, the mucous membrane of the lips, tongue, and palate having been excoriated with the acrid matters she had been vomiting from the date of the attack to that of the operation; but by giving small quantities frequently that difficulty was overcome.

A few days after the abdominal wound was completely united, and when the patient was anticipating being ordered to sit up out of bed, she had a curious attack of pain, swelling, and œdema of the left limb, tenderness along the course of the saphena vein, and enlargement of the inguinal glands—a condition which had many analogies to phlegmasia dolens. By fomentations, elevation of the limb, and subsequently bandaging, this condition was overcome, and the cure was then complete.

On reviewing the various points of interest in connexion with this remarkable case, I confess to having two very opposite feelings: the first, that of satisfaction at the fortunate result of the operation; the other, that of disappointment at not having met or recognised any tangible abnormal condition to account for the symptoms.

I presume it will be admitted that here were all the well-known signs of intestinal obstruction; that these had continued sufficiently long to make the hope of spontaneous recovery extremely small; that the rapidity with which they were increasing and telling on the general state of the patient called for immediate action, if at all; and that the patient's condition of extreme danger justified our having resort to a surgical operation, even if it had been attended with the fatal result which I dreaded. I felt then, and still feel, that I could not withhold from the patient what I believed to be her only chance of safety.

I am aware that a certain number of cases of ileus—that is, cases presenting symptoms of intestinal obstruction—

get well spontaneously, in what way has not been very accurately found out; but there are few, if any, in which stercoraceous vomiting has gone on uninterruptedly for more than forty-eight hours which have not terminated fatally; and it is a question of importance if some of those fatal cases might not have been saved by a resort to surgery before the vital powers had been reduced to too low an ebb.* It is true that it is a most unsatisfactory proceeding to make an incision into the abdomen without having a clearly defined notion of what one will meet with; but that is the whole interest of the question. The very same symptoms, occurring in the very same way, may arise from some unknown condition which in a few instances terminates spontaneously in a favourable way, while in others they arise from an abnormal condition, recovery from which is in some cases impossible, and in many others is only possible by a surgical operation. I submit, then, that in the case related the urgency of the symptoms, and their steady increase in violence, gave us good grounds for the opinion we formed. The patient, in fact, was as nearly as possible in the condition indicated in the extract from Mr. Phillips's paper to which allusion has been made.

But the next point of interest is, what was the cause of the obstruction in this case?—and how was it that the whole of the symptoms were relieved immediately after the operation? I confess I cannot give a decided answer to this to my own satisfaction. First, the obstruction may have arisen from a knuckle of intestine strangulated in some way which I did not find out, and which may have become disentangled during the process of unraveling all the folds of the intestine without my being conscious of having disentangled it; or it may have arisen from the very sharp angle at which one or two of the folds of the small intestine were bent on each other—glued, as they were, in this position by recent lymph,—which angular twists were undone when I passed the coils of bowel through my fingers; or, lastly, may it be possible that the whole of the symptoms arose from the presence in the abdominal cavity of the acrid, whey-like effusion, the result of peritoneal inflammation, although stercoraceous vomiting is so rarely a concomitant of uncomplicated peritonitis as to make the last supposition very problematical? I was led to hazard this explanation in default of the first two before I was aware that Mr. Hancock had proposed a similar operation in a paper read before the Medical Society of London in 1848. In a case of disease of the appendix cæci which caused peritonitis, and also caused a circumscribed swelling in the right iliac fossa simulating a pericæcal abscess, Mr. Hancock made an incision into the abdomen, and gave exit to a large quantity of greenish flocculent serum, with decided relief to the symptoms, and ultimate cure of the patient; and, in his remarks on the case, he says: "I trust the time will come when this plan will be successfully employed in other cases of peritonitis;.....cases where the effused fluid destroys rather by its character than its quantity;.....where the sinking and typhoid symptoms depend on the presence of the offensive fluid in the peritoneum."

This same idea occurred to myself immediately after the operation, when I reflected that, whatever might have been the cause of the stercoraceous vomiting, one thing was obvious—that recovery from a peritoneal attack which left such offensive acrid fluid in the peritoneal cavity was clearly impossible, and that the operation afforded a chance of recovery which otherwise the patient would not have had. It is quite clear that the presence of that greenish flocculent serum which was sponged away would have given rise to typhoid symptoms, independently of any other condition. Still, however much the operation may have prepared the way for the patient's recovery by the removal of this fluid, it is obvious that it could not have been the cause of the stercoraceous vomiting; and I incline to believe that the angular twist of the small intestine, which I unraveled and left free in the abdominal cavity, was really the cause and seat of the obstruction.

In whatever way, then, it may be explained, the fact remains, that up to the moment of the operation the patient was vomiting stercoraceous matter, with rapidly increasing signs of collapse; immediately thereafter the vomiting ceased and a rapid improvement of all the symptoms took place—effects which, I submit, are fairly attributable to the operation of gastrotomy.

* A very interesting case is recorded in THE LANCET for 1861, by Prof. Gairdner, and some others in Dr. Brinton's book.

ON SOME DISORDERS OF THE NERVOUS SYSTEM IN CHILDHOOD.

Being an abstract of the Lumleian Lectures for 1871, delivered at the Royal College of Physicians.

BY CHARLES WEST, M.D.,
PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN.

LECTURE II.

DR. WEST'S second lecture was chiefly devoted to the subject of Chorea. Girls are rather more liable to this disease than boys. Of the lecturer's cases, 64 per cent. were of the female sex. Girls and women are especially liable to the slighter forms of disease of the nervous system—neuralgia, hysteria, &c.; while in the case of acute hydrocephalus and the graver forms of disease, males preponderate. The cause of chorea, the lecturer believed, is not to be found in any invariable organic change, such as is implied in the embolic theory of Dr. Hughlings Jackson. It is rare for chorea to continue limited to one side. In 66 cases it was confined to the right side in 1, and to the left in 2. But it commonly begins on one side; and the side first affected usually, but not always, suffers more severely. Out of 66 cases observed by the lecturer, 20 were males, 46 females. In 14 the right and in 14 the left side was first affected; in 1 case the movements were limited to the right side, in 8 they began on the right side and continued throughout more severe on that side; in 2 they were limited throughout to the left, in 3 they were severer on the left than on the right. In the remaining 38 cases the movements affected both sides from the first. The affection of the arms commonly precedes that of the legs when both sides are involved, but the legs recover first. It is rare for improvement to advance on both sides with equal rapidity. In 16 cases rheumatic symptoms accompanied or preceded the chorea. In 11 the heart-sounds were accompanied by a systolic bruit, which persisted after convalescence in 10. In 1 out of the 16, rheumatic symptoms with extensive heart disease followed in the course of the chorea. In 9 cases, although no rheumatic symptoms were present, and there was no history of rheumatic affection, the heart was found to be already the seat of valvular disease. In two cases chorea came on during scarlet fever; in one of these the heart was not affected, and in the other the heart disease was so grave as to cause death. One instance occurred after measles, 12 were preceded by general failure of health, 1 instance was attributed to over-work, 6 to fright, and 1 with a temporary and 1 with a permanent cardiac bruit. In the remaining 19 no special cause was assigned. There does not appear to be any connexion between the presence or absence of rheumatism or heart affection, and the severity of the chorea or the tardiness of the recovery, nor any special disposition to the recurrence of chorea in those whose first attacks were associated with rheumatism; but there is undoubtedly a connexion between that state of constitution which predisposes to chorea and that which predisposes to rheumatism. Their true connexion is probably as yet unknown. Emotional causes, Dr. West believes, do not play so important a part in the production of chorea as is commonly supposed.

There are two forms of chorea over which mental and moral culture have a most salutary influence. In two classes of cases it is inapplicable—those of partial chorea, and those in which the movements are very violent. In the latter case splints on the legs and arms, and swathing the body completely in a soft bandage, will often, by restraining the movements, greatly diminish the resulting fatigue. But between these two there is a large intermediate class, over which moral culture and regulated movements exercise a remarkable influence. A great drawback to success is the difficulty of arousing the will to activity. Hence gymnastics are of service in proportion to age, and are more useful when practised in a class, than when carried on alone. Music, or a simple chant, in time with which the movements can be made, helps to fix the attention and to expedite the cure. Of "specific" remedies Dr. West has been able to find none which seemed to him to possess such a character. The whole class of

antispasmodics—henbane, belladonna, conium, chloral, bromide of potass—had no other effect than to cause sleep. Tartar emetic in large doses seemed of considerable service in some severe cases with dry skin. Strychnine had not seemed to him to merit the high encomiums Trousseau passed upon it, and its use is not free from danger. The only remedy really useful, and that only in exceptional cases, is the sulphate of zinc, given in increasing doses from 1 to 20 grains. It had effected considerable good in some cases in which other remedies had failed, and in which there was no distinct indication for the use of this or that remedy.

The lecturer then glanced briefly at some forms of pseudo-paralysis in children, especially in association with rickets, and analogous to the loss of mental power after fevers, at the paralysis of the idiotic, and the paralysis due to cerebral tubercle. He concluded with a few words on the subject of "essential" or infantile paralysis, respecting which he drew special attention to the proportion existing between the early exaggeration of sensibility and the subsequent loss of power, and to the comparative rarity of absolute recovery, even in the most favourable cases.

ON THE TREATMENT OF GONORRHŒA.

BY E. NOBLE SMITH, L.R.C.P., M.R.C.S.,
LATE RESIDENT MEDICAL OFFICER TO ST. MARY'S AND THE LOCK HOSPITALS.

FROM time to time we see advocated special modes of treatment for gonorrhœa, more especially as regards injections. The truth is, I believe, that most injections have their value, if used with discretion, and in protracted cases in variety. The indiscriminate use of copaiba and cubebs is followed in many cases by unpleasant results. Their employment should be the exception. A strong, healthy man, not over-sensitive, may take these drugs perhaps with benefit; but a strong healthy man is the exception, and the generality of patients will be found to do better upon a treatment the result of which has, in my hands, proved uniformly successful.

The first indication of an attack of gonorrhœa is an itching at the orifice of the urethra, and a peculiar irritation lower down, similar to that caused by ascarides, and which begets an urgent desire to micturate. If necessary, a mild purgative should be administered; but the effect of this is often to produce a subsequent irregularity of the bowels, which is not beneficial, and should therefore, if possible, be avoided. A glass of warm milk before rising every morning often has the desired effect. The diet should be regulated, and all food should be of a plain nature. Meat should be fresh, and not preserved; no condiment whatever should be allowed; beer and spirits should be strictly forbidden, and also wine, except claret, which, when diluted with water, may be taken in moderation; coffee and tea should be interdicted, and it must be remembered that, as the patient is not to take any exercise, a diminution in the quantity of food should be observed. Early departure to bed is advisable. The directions as to diet are of the first importance, and, if strictly carried out, will do very much towards the recovery of the patient. A mixture containing conium and mucilage, or equivalent substances, should be given several times daily; and, *when all inflammatory symptoms have disappeared*, injections may be commenced; any simple astringent will very soon effect a cure, without any danger. I prefer the acetate of lead; but if immediate cure does not result, the injection should be changed, the great secret in using injections being to vary them sufficiently; this is more the case in gleet. In old-standing gleet the injection should be changed about every three or four days, and returned to again.

In gonorrhœa, after the discharge has ceased, the injection should be continued for at least a week; less frequently, however—say once, and sometimes twice, a day. Neglect of this precaution is often the cause of gleet. This *system* of practice I believe to be the best. I have said nothing of complications, considering it unnecessary.

March 14th, 1871.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

WESTMINSTER HOSPITAL.

CASES UNDER THE CARE OF MR. FRANCIS MASON.

THERE are several cases of interest now under observation at this hospital. The first is that of a man who presents an example of remarkably rapid recovery after a very severe subcutaneous injury to the knee-joint. While engaged in cleaning a skylight he fell down a well staircase to a distance of nearly 100 ft. In the fall his left knee must have come in contact with the balustrade, for Mr. Mason found the injured leg to be everted to nearly a right angle with the thigh. The internal lateral ligaments must therefore have been extensively ruptured; nevertheless, the skin was uninjured. Strange to say, with the exception of one or two very slight scalp wounds, he sustained no other injury. The limb was readily brought into position, and adjusted to a splint, after which the patient did not have a moment's pain. In about a fortnight he could flex and extend the injured leg almost as freely as the other.

In the adjoining bed is a man on whom Mr. Mason has performed an operation of some novelty for the formation of a new nose. The patient is thirty-one years of age, and, six years ago, had severe ulceration of the palate, which induced necrosis of the bones in this region, and ultimately destroyed the whole of the nose. The operation commenced by making two side flaps from the cheeks, as shown in the diagram at A A. These were dissected up to the margin of

the nasal aperture, and, placed with their raw surfaces forwards, assisted materially to form the two alæ. A similar flap was brought down from the nasal bones (B), with its raw surface forwards. A piece of skin was then taken from the forehead. This flap (which for economy of space is not fully represented in the woodcut) differed slightly from that ordinarily recommended, in that, by means of an unusually large pedicle, it was made to include the supra-orbital artery of one side, and also in that it was made more convex over one eye, and rather concave at the opposite edge. The flap, having been gently twisted, was brought down and laid on the raw surface already referred to. The parts were then carefully stitched with silver wire. In devising

this operation Mr. Mason's object was to give prominence to the new organ, and to reduce to a minimum the chance of its sloughing, the two flaps from the cheeks being extremely vascular. The space left by these flaps is unobservable, so accurately were the several edges adjusted. The man is progressing very favourably, and the new nose is really an excellent substitute for the original.

The next case was one of varicocele, which was treated in the following manner. Mr. Mason informed us that he had intended to make use of an instrument recently suggested by Mr. Wood, of King's College, but, this not being at hand, an ordinary American wooden letter-clip was used as an impromptu substitute. A loop of thread (wire would do equally well) having been placed subcutaneously round the veins in the usual manner, the ends were passed through two holes previously bored in each extremity of the clip on the spring side. The spring having been firmly compressed with the fingers, the threads were drawn tightly and fastened in a figure of 8 form to a cross-bar at right angles to the clip (in this instance a brass-headed nail was used with the head downwards). As soon as the fingers were removed the spring came into play and exercised a steady traction on the thread, which made it gradually cut through the veins which it embraced. This simple instrument possesses the additional advantage of enabling the surgeon to increase, if necessary, the amount of pressure on the veins, by pinching from time to time, or gradually compressing with an elastic band, the other extremities of the clip, the part which is intended to grasp papers, &c. The little letter-clip recommends itself by its simplicity, cheapness, and durability, and appears in this instance to have been very effectual. It is Mr. Mason's intention to apply it in other cases in which it is required to adapt a steady force to the gradual cutting through of tissues.

Another case was that of a woman with ununited fracture, in which a new method was adopted for fastening the fractured ends. To this we shall refer on a future occasion.

A fourth case is that of a girl, about twenty years of age, upon whom Mr. Mason had some time ago operated successfully for a cleft through the hard and soft palate. In order to improve the voice, he had recently divided the sides of the soft palate in the manner devised by him, and described in THE LANCET of August 7th, 1869 (p. 198). The patient's voice was said to have undergone a decided improvement.

ROYAL FREE HOSPITAL.

A CASE OF ARTICULAR DISEASE OF THE KNEE FOLLOWING AN INJURY; RECURRENT SYNOVITIS; EXCISION OF THE JOINT TWELVE YEARS AFTER THE INJURY; RECOVERY.

(Under the care of Mr. JOHN D. HILL.)

THE following account of the case is taken from notes by Mr. John Bellwood, dresser.

The patient, who was twenty-seven years of age, was admitted with a stiff knee, the leg being bent almost to a right angle with the thigh. The patella was found to be anchylosed to the femur; the tibia was partly dislocated backwards and outwards, and was rotated by the biceps; the depressions of the joint were filled out by fluid; the joint itself was exceedingly painful on pressure and on movement, especially over the inner surface of the head of the tibia; the inner aspect of the tibia, nearly as low down as the malleolus, was hollowed out and covered with closely-adherent cicatrix tissue. On being questioned as to his history, he stated that, thirteen years previously, his tibia had been smashed by a sledge hammer; and that, in the course of the following twelve months, during the whole of which he was laid up, portions of bone were cast off. One of these was 7 in. in length. After that he walked with crutches for a year and a half, and then became able to lead an active life until, shortly before admission, his leg gave way under him while he was engaged in carrying a heavy load. He was in a low febrile condition, with a small pulse of 118, and had lost flesh since the accident.

A splint, which prevented all motion, was adapted to the limb; blisters were applied to either side of the joint, and, later, leeches, fomentations, opium lotions, iodine lotions, hot, and cold applications were successively tried. He had a liberal diet, with twelve ounces of wine and a pint and a half of stout, and took an opiate every night. The swelling and pain, however, increased; the general condition became steadily worse, and the patient at length earnestly requested that the limb might be amputated. Accordingly, seventeen days after admission, Mr. Hill opened the joint, and found a state of things which led him to choose excision in preference to amputation, in spite of the patient's unpromising general condition. After the operation the limb was fixed on a back splint, provided with interrupted side splints. In thirty-one days' time union of the soft parts had taken place, and the patient was doing well. By the forty-fifth day an abscess had burrowed from the inner side of the head of the tibia to about four inches above the outer condyle of the femur, and the general condition was rapidly deteriorating. The abscess was opened and poulticed; strong beef-tea, wine, and bark with nitric acid, were administered. Afterwards a large bedsore appeared on the sacrum, and one behind each heel, and the breaking down of some of the old cicatrised tissue over the inner aspect of the tibia was followed by exfoliation of about two inches of bone; but, at the end of six months, firm bony union was established, and the patient could get about well with the aid of crutches, bearing a good weight upon the damaged limb, which had undergone shortening to the extent of less than two inches.

The following is the description of the parts which were removed from the diseased joint: The articular surface of the patella was here and there very thinly covered with cartilage, and bound to the femur by fibrous bands, the result of past inflammation; the articular surface of the tibia was denuded of cartilage, and necrosed, especially behind the spine at the part where the crucial ligaments cross each other; the semilunar cartilages were partly absorbed and partly fused into a mass of dense adventitious tissue produced by inflammation.

PROVINCIAL HOSPITAL REPORTS.

LIVERPOOL ROYAL INFIRMARY.

CASES UNDER THE CARE OF MR. REGINALD HARRISON.

Chronic Inflammation of the Larynx; impending suffocation; tracheotomy; recovery.—The following case illustrates the advantage of tracheotomy, not only in affording immediate relief to the distress occasioned by impending suffocation, but by placing the inflamed organ in a state of comparative rest, and facilitating the processes of repair which the abnormal activity of the part interrupts.

On his admission, the patient (Henry A——), who was twenty-four years of age, was in a state of considerable distress, arising from difficulty of breathing, which rapidly increased. The symptoms, which had latterly increased considerably, had existed for nearly a year. No distinct history of syphilis could be obtained, though he had two slight frontal nodes. He had never suffered from hæmoptysis, and, beyond some coarse breathing about the apex of the right lung, there were no advanced symptoms of chest complication. He was of a decidedly strumous type. Four years previously his right elbow-joint had been excised by Mr. Bickersteth, with a very good result, the resulting limb being an exceedingly useful one. When admitted, he was so much distressed that he was not able to submit to inspection by the laryngoscope. As several measures, designed to afford relief, had already failed, and as the obstruction to the entrance of air was clearly on the increase, it was determined, after a consultation, that tracheotomy should be performed without delay. The presence of large veins and a very receding trachea rendered the operation more than usually embarrassing. The patient made a good recovery. The tube was kept in for two months. When the patient was seen about a fortnight later the opening in the trachea had completely closed, the breathing was natural, and the voice was almost completely restored. He was advised to continue the use of cod-liver oil, with iodide of potassium and iron.

In reference to this patient, Mr. Harrison says that, in similar cases of chronic character, delay not rarely results

in sudden death from œdema and spasm of the glottis, a condition which in all probability might be averted by early operative interference. When the proper aëration of the blood is interfered with, the time for the performance of tracheotomy has arrived, for the patient's blood is not equal to the repair of the diseased part, whilst the slightest accident may be sufficient to cause instantaneous death.

Strangulated Femoral Hernia; herniotomy; opening of the sac, with its subsequent closure by carbolised suture; recovery. Charles W——, aged sixty-six, had suffered from femoral hernia on both sides for several years, but up to fifty hours before admission the protrusions had been readily reducible. He then found himself unable to return the hernia on the right side, and symptoms of obstruction and strangulation, including stercoraceous vomiting, speedily set in. Mr. Harrison operated immediately. The sac had to be opened to admit of the return of a small knuckle of deeply congested intestine. As there was a good deal of general oozing, the opening in the sac was carefully and securely closed with a continuous suture of fine carbolised catgut; the skin was drawn together by ordinary sutures, and the wound was dressed on the antiseptic plan, which is now generally adopted at the infirmary.

The patient suffered from a slight attack of delirium tremens, which was successfully treated with hydrate of chloral, and made a good recovery. He left the infirmary three weeks after the operation.

The careful closing of the opening made in the sac is, the operator thinks, the noteworthy feature of this case, because inflammation of the peritoneum is often, he believes, excited by blood and other fluids making their way back from the wound, and the closure of the sac in the manner described entirely prevents such an occurrence. Mr. Harrison first saw the plan adopted by Mr. Bickersteth some years ago, and he has since had recourse to it with advantage on several occasions.

WEST NORFOLK AND LYNN HOSPITAL.

PENETRATING WOUND OF THE ABDOMEN BY A SCYTHE; FÆCAL FISTULA; RECOVERY.

(Under the care of Mr. RENDALL.)

FOR the notes of the following case we are indebted to Dr. Lowe:—

G. D—— was admitted for an extensive wound of the left side, sustained by falling on a scythe. This had penetrated the left hypochondrium, inflicting a vertical external wound of which the lowest part was on a level with the umbilicus, and, cutting through the tenth rib, it had passed downwards and backwards. A portion of omentum protruded through the wound. Considerable hæmorrhage took place into the abdominal cavity, corresponding with an area of percussion-dulness. The patient suffered no collapse, and his pulse remained fairly good. The omentum having been returned, the edges of the wound were brought together by means of four silver sutures.

On the third day the pulse was 120, the skin hot, the countenance anxious; there was pain in the right hypogastrium, and swelling of the scrotum. On the fourth day an enema brought away a quantity of fæcal matter. On the fifth day the bowels acted copiously thrice; there was erysipelas of the left hypochondriac and iliac regions. By the seventh day the wound had united in the centre, and on either side there was a small opening which freely emitted fæcal matter. The lateral region was tense, crepitant, and tympanitic; the pulse 96. By the ninth day the redness and swelling of the integument had almost completely disappeared. Fæcal matter continued to pass from time to time from the wound; but on the twenty-second day, after an interlude of three days, a large quantity of solid fæces forced its way out, stretching the wound and the newly formed cicatricial tissue almost to bursting. The part was immediately supported by the firm application of strapping.

From that time the wound gradually closed, the quantity of fæcal matter emitted from it becoming smaller and smaller, until it altogether ceased. The site of the wound, however, was bulged by the pressure of flatus and fæces. At the end of four months the patient, having been provided with a softly-padded truss adapted to the part, was made an out-patient. In two months more he was considered to be quite beyond danger, and passed from observation. At that time he continued to wear the truss as a measure of precaution.

Medical Societies.

MEDICAL SOCIETY OF LONDON.

MONDAY, APRIL 24TH, 1871.

DR. ANDREW CLARK, PRESIDENT, IN THE CHAIR.

DR. DOUGLAS POWELL related some cases, and exhibited two hearts, illustrating what he regarded as two recognisable varieties of Obstructive Mitral Disease. The physical signs in one were, an irregular intermittent pulse, increased cardiac dulness, a systolic apex murmur with no distinct presystolic bruit, and a slight diastolic murmur to the left of the ensiform cartilage. The patient died suddenly shortly after taking a substantial breakfast. On post-mortem examination, the right cavities were found distended, the left ventricle was contracted, the mitral valve stretching across the mitral orifice as a rigid diaphragm, slightly convex towards the ventricle, and perforated by a slit like a button-hole opening. The second case showed the two flaps of the mitral valve fused together at their margin so as to form a funnel projecting into the ventricle, and communicating with it by a small opening. There was great hypertrophy, dilatation, and hardening of the right ventricle and left auricle, the left ventricle being of natural dimensions. The physical signs had been, regular pulse, prolonged presystolic murmur at apex, not followed by any systolic bruit. The patient had died of cerebral embolism. Dr. Powell next alluded to a case in the Brompton Hospital, under the care of Dr. Cotton. After referring to the other illustrative cases in attendance for examination in the adjoining room, Dr. Powell remarked that, as regards the prognosis, he would consider the more common form of obstructive mitral disease as necessarily more speedily fatal than the funnel variety, since they were usually complicated by regurgitation, which greatly increased the pulmonary congestion. It neutralised the increased power of the right ventricle. The tendency to sudden death from engorgement and consequent paralysis of the right ventricle was great. In the funnel variety a more favourable prognosis as to the duration of life could be given. The author regarded these cases as of congenital origin, and the thickening of the valve, sometimes (not always) present, as the result of long-continued mechanical strain. The comparatively sudden development of symptoms might be explained by the fact that the equilibrium of the circulation was maintained so long as the right ventricle continued to act with full vigour. Referring to the question of treatment, Dr. Powell looked upon quietude, both mental and bodily, as of the first importance. An appropriate modification in diet, and the amount of stimulants taken, was particularly important as a precautionary measure in those who suddenly desisted from active life.

Mr. MAUNDER made some remarks "On the capability of *always* securing good use of the Triceps Muscle after Excision of the Elbow-joint." He advocated the preservation uncut of those fibres of the triceps tendon which, passing forwards between the point of the olecranon and the external condyle, are continuous with the fascia of the forearm. An upper extremity was shown on which he had by a longitudinal incision excised the elbow after his own method, preserving a stout band uniting the arm and forearm, and consisting of triceps muscle and tendon, anconeus muscle, and deep fascia of the forearm. Out of four patients exhibited, two had been submitted to excision for compound comminuted fracture, and two for strumous disease. Three of these patients possessed to an unusual degree the power of active extension by the triceps muscle. The fourth, which had been operated upon in the usual way, did possess this power, and was shown by way of contrast. All four possessed most serviceable limbs, and showed the great use of excision of the elbow-joint.

Mr. W. ADAMS read a paper on the "Selection of Cases for the Operation of Subcutaneous Division of the Neck of the Thigh-bone." After observing that this operation,

which he first proposed, had now been successfully performed five times, and only once (in fibrous anchylosis in a child) with an unfavourable result, the author stated that bony anchylosis is the result of several morbid conditions, differing as to the destructive or non-destructive character, as affecting the bones. After discussing the question in great detail, he gave the following as the conclusions to which he had arrived:—1. That in rheumatic anchylosis no destruction of bone ever exists. 2. In anchylosis after pyæmic inflammation destruction of bone rarely exists, the soft structures only being destroyed. 3. In anchylosis after traumatic inflammation, in healthy adults, no destruction of bone occurs as a general rule, even after acute suppurative inflammation, the soft structures only being destroyed. 4. In anchylosis after strumous disease of the joint, when arrested in the early stage, only superficial caries of the head of the bone occurs, and the operation can generally be performed. 5. In anchylosis following the more severe forms of strumous disease, in which there has been evidence of caries and necrosis of bone, destruction of the head and neck of the thigh-bone may be diagnosed, and in these cases the operation cannot be performed. Thus it will be seen it is only in the fifth class of cases that the operation is decidedly negatived.

Mr. BRUDENELL CARTER showed a new Reflecting Ophthalmoscope for purposes of demonstration, arranged by Dr. Burke, of Paris. It consisted of two concave mirrors fixed on stands, and afforded an image of the fundus oculi four inches in diameter and brilliantly illuminated. He also exhibited to the Fellows, by its means, the eye of a patient suffering from syphilitic neuro-retinitis.

CLINICAL SOCIETY OF LONDON.

FRIDAY, MAY 26TH, 1871.

DR. W. W. GULL, PRESIDENT, IN THE CHAIR.

DR. MEADOWS related a case of Acute Disease of the Hip-joint following the introduction of a Tangle Tent into the Uterus. The patient was thirty-one years of age, married ten years, sterile, and suffering from dysmenorrhœa. For this the cervix uteri was dilated with tangle tents, and after several had been applied she was seized with severe pain in the left hip-joint, and she then came under Dr. Meadows's care for some supposed pelvic inflammation. It turned out, however, to be a case of acute inflammation of the hip-joint, which rapidly suppurated, and ended in the course of a few weeks in destruction of the joint and the death of the patient. On post-mortem examination, no cellulitis or inflammation of any kind was discoverable about the uterus or its appendages, but an enormous abscess had completely destroyed the hip-joint and parts adjacent. There was no indication whatever of any mischief having been done to the uterus itself.

Mr. COOPER FORSTER took exception to any idea as to the hip-joint disease being tubercular, but believed it was one of the many cases in which pyæmia occurs rapidly, consequent upon abrasion of mucous membrane, and that nothing else could account for so speedy a destruction of cartilage.

Dr. BUZZARD asked whether other joints were examined, as the presence of suppuration in more than one would be conclusive as to the pyæmic character of the affection.

Mr. LAWSON observed that a very considerable amount of difficulty sometimes occurred in the withdrawal of these tangle tents, because the tent was much confined by the neck of the uterus, and greatly dilated beyond, so that its removal was very much like the process of drawing a cork out of a bottle.

Mr. WARRINGTON HAWARD, supporting the pyæmia hypothesis, mentioned that, of a hundred and thirty cases of joint disease collected by him, evidences of tubercular disease existed in nine and of scrofula in seventeen only, and that the temperature in Dr. Meadows's case negatived the idea that tubercle had influenced the disease.

Mr. BRUDENELL CARTER inquired if any abrasion were necessary, and said that he had been informed of three instances in which pyæmia had been consequent upon simple gonorrhœa.

Mr. LAWSON TAIT related brief particulars of a fatal case in which these tents had been used, and expressed a belief that they were dangerous.

The PRESIDENT thought that Mr. Carter's remarks as to gonorrhœa were important.

Dr. MEADOWS, in his reply, emphatically repudiated the expression of any opinion as to the tuberculous character of the disease, and said that a distinct double os uteri existed, and that no other joints were examined. He disagreed with the observations of Mr. Tait, as to the danger incurred by the use of tangle tents.

Mr. HOLTHOUSE read a paper "On Cases illustrating the Treatment of Temporarily Irreducible Hernia." Having expressed his entire concurrence in the doctrine that there was no remedy for an invincibly strangulated hernia but the surgeon's knife, he related several cases to show that many hernia, though accompanied by symptoms of strangulation, were not invincibly strangulated, and might be reduced without resort to an operation. The remedy which he had found of much service in overcoming obstructions which were not invincible, was opium; and this drug had the further merit of being a very delicate and safe test of the necessity or otherwise of an operation—a single dose was sufficient to determine the point. If it were rejected, the patient should be immediately got under the influence of chloroform, a gentle attempt made to reduce the hernia by the taxis, and, this failing, herniotomy performed; on the other hand, if the opium were retained the symptoms would abate, the rupture would go back, and no operation would be necessary.

Mr. COOPER FORSTER, in commenting on the enormous range for discussion opened out by these notes, denounced energetically the opium and other temporising lines of treatment, and maintained that if a more speedy recourse than is usual was had to the knife, the mortality in these cases would be reduced at least 80 per cent.

Mr. TAIT urged the employment of hypodermic injections of morphia, in conjunction with chloroform and the taxis.

Dr. ANSTIE read a remarkable case of Neuralgia in all the three branches of the fifth nerve, reinduced, in a person who had suffered from it before, by the intercurrence of constitutional syphilis. The complications were remarkable: there was complete anæsthesia of the affected side of the face, exactly reaching the mesial line, complete paralysis of the third and sixth nerves, loss of taste in the neuralgic half of the tongue, loss of smell on both sides, and spasms of the masseter muscle. The neuralgia and the anæsthesia were rapidly cured by large doses of iodide of potassium, and, singular to say, not only the function of taste, but also that of smell, recovered *exactly pari passu with the recovery of the fifth nerve*. The ocular paralyses remain at present unaffected. The spasm of the masseter disappeared simultaneously with the neuralgia and anæsthesia. The woman, who was married and had three very healthy children, and had never aborted, was probably only syphilised about one year ago, and many years after the first attacks of neuralgia, which partook of the character of migraine.

Dr. HUGHLINGS JACKSON remarked on the great interest of Dr. Anstie's observation on the occasional coincidence of facial neuralgia with partial anæsthesia of the painful region. He (Dr. Jackson) supposed persistent, although partial, loss of feeling must depend on destruction of nerve-fibres, and neuralgia especially if it were paroxysmal, on discharges of ganglion cells connected with intact fibres. An analogous fact was the not unfrequent occurrence of convulsion of muscles which are imperfectly paralysed. Dr. Jackson asked as to the condition of the masseter and temporal muscles. He suggested that the loss of smell might depend on an olfactory neuritis analogous to optic neuritis, and, as bearing on this, asked if an ophthalmoscopical examination had been made. It was certain that severe optic neuritis might exist when sight was unaffected; in some cases of cerebral disease, there was loss of smell with amaurosis from optic neuritis.

Mr. LAWSON said that it was rare to find paralysis of the ocular muscle occurring very quickly after syphilis, several years usually intervening.

Dr. BUZZARD thought that, considering there was evidence of lesion of the third, fifth, sixth, and probably the fourth nerves of one side, it was easier to imagine that the syphilitic effusion (if such it were) involved also the first pair of nerves than that lesion of one only of the fifth pair caused loss of smell on both sides.

Mr. CARTER had seen Dr. Anstie's patient once; he found

the ptosis complete, but did not make a complete examination, for which he expected to have had another opportunity.

Mr. TAIT asked if any affection of the pupil existed.

Mr. FORSTER hoped that Dr. Anstie would not add that disease to the long list of results already accredited to syphilis.

Dr. ANSTIE said that the case was most undoubtedly syphilitic. No doubt twelve months was an early period after infection for tertiary symptoms to appear; but they were unmistakable. As regards the loss of smell, he thought that, supposing it to depend on the lesion of the fifth, there was no impossibility that it should occur on both sides. Although the neuralgia was unilateral, many equally singular anomalies occurred among the complications of neuralgias. He had not examined the eye with the ophthalmoscope, as it seemed that the function of the retina was perfect; had he known of the facts observed by Dr. Jackson he would have made the examination.

Dr. HUGHLINGS JACKSON gave particulars of a case of Right Hemiplegia, with Loss of Speech (nearly complete aphasia), which had been investigated by himself and Mr. Stephen Mackenzie. The hemiplegia, with the affection of speech, pointed to some kind of disease of, and of the convolutions near to, the corpus striatum. From the manner of onset, and from other circumstances, he inferred that there was softening from thrombosis; and as the patient presented well-marked external signs of syphilis, he supposed the softening depended on thrombosis of an artery which was diseased from syphilis. He did not speak of atheroma (endarteritis), which was believed by some to be an occasional result of syphilis, but of what may be called nodes of arteries (gummatous affections). He alluded to the observations of Bristowe (Pathological Society's Transactions, 1859) on thrombosis of cerebral arteries from syphilis, and those of Wilks (Guy's Hospital Reports, 1863) and Moxon (ibid., 1867-8) on cases of syphilitic disease of cerebral arteries, and referred to several cases published by himself (THE LANCET, 1866, and London Hospital Reports, vol. iv.) He urged the great importance of recognising that many "syphilitic affections" of the nervous system are really dependent but very indirectly on *syphilitic* changes, and especially that in some cases of "syphilitic hemiplegia" the pathological condition of the nerve-centre on which the palsy *directly* depends is like that produced by embolism. We quickly cure recent palsies of cranial nerves from the direct action of syphilis on the nerve-bundles, but to cure certain cases of syphilitic hemiplegia we have to do more than to treat syphilis, and our treatment of these cases is often unsuccessful.

The PRESIDENT considered the case very important, and remarked parenthetically that iodide of potassium has no power to cure the effects of syphilis.

Mr. CARTER related an instance that had come under his own observation in which the patient had been treated for syphilis with iodide of potassium with benefit; but hemiplegia supervened, and from that time the drug did no good.

Dr. ANSTIE had prescribed half-drachm doses of iodide of potassium for neuralgia with particularly favourable results.

Mr. CALLENDER then read a note on a plan of Reducing Old Dislocation at the Shoulder. The method, illustrated by the history of a case, consists in raising the elbow of the dislocated limb across the chest nearly to the level of the interclavicular notch, forcing the raised arm outwards, rotating the arm in so doing, and lastly, whilst still rotating, somewhat depressing it. Practically this plan of manipulation avoids all risk of injuring the great vessels in the axilla, as all pressure upon them is done away with.

This meeting closed the session of the Society.

ALKALOID DETECTED BY PICRIC ACID.—Mr. Hager has found that this acid precipitates various alkaloids from their solutions, such as brucine, strychnine, veratrine, quinine, cinchonine, and some alkaloids of opium. Morphine and atropine, however, are precipitated only from neutral and concentrated solutions; but the precipitate dissolves pretty easily in water. Glucosides, caseine, and pseudo-morphine resist the action of the picric acid.

Reviews and Notices of Books.

The Physiological Anatomy and Physiology of Man. By ROBERT B. TODD, WILLIAM BOWMAN, and LIONEL S. BEALE. A New Edition by the last-named Author. Part II. of Vol. I. Longmans, 1871.

THE second part of this too long delayed work embraces the third to the fifth chapters of the old edition inclusive, but is now divided into four chapters, and is occupied with the consideration of fibrous, elastic, and connective tissue, cartilage, bone, and fat. The section on the different forms of connective tissue is very complete, though of course strongly tinctured with the peculiar views of the present editor in regard to its structure and development. He calls attention to the different varieties of tissue that have been included under this common term—one being the true areolar or connective tissue, which is developed as a special structure for definite purposes; a second being such fibrous connective tissue as is found in the umbilical cord and vitreous humour of the eye; whilst a third appears to result, in adult life, from the decay of various textures, as of nerves, vessels, ducts, &c. And he strongly opposes the view that connective tissue is the actual seat of the active changes of inflammation and various forms of degeneration. "It is supposed," he says, "to become hypertrophied, and then to contract, and, by thus compressing glandular tissues, to cause them to waste and bring about their destruction. We cannot, however, subscribe to these views, for careful observation compels us to conclude that in many forms of inflammation the connective tissue is passive, while the phenomena which have been wrongly attributed to it are mainly due to the presence of particles of germinal matter which have been detached from the white blood-corpuscles, and have passed through the vascular walls into the meshes of the connective tissue, where they have multiplied and grown very quickly. These, and not the connective-tissue corpuscles, are the bodies from which in many instances those collections of granular cells or corpuscles, pus-corpuscles, and allied bodies familiar to all who have studied the alterations occurring in tissues during the early stages of inflammation, originate." With these remarks we are disposed substantially to agree. In a note to this chapter, Dr. Beale complains that his observations upon the finest nerve-fibres are objected to by various German writers simply because they are opposed to their own foregone conclusions as to the mode in which the nerves terminate. These fibres they hold to be fibres of connective tissue, "but since these finest nerve-fibres are traceable into dark-bordered fibres, they thereby place themselves in the dilemma of admitting either that such dark-bordered fibres are continuous with connective tissue, or that dark-bordered fibres are connective tissue." Dr. Beale contests, and we are disposed to think justly, Virchow's doctrines of the elastic tissue constituting a tubular nutrient system, and is equally opposed to Kölliker's notion that the yellow elastic tissue represents intercellular substance, but believes that elastic fibres result from a peculiar modification of nuclei or masses of germinal matter.

We do not know on what grounds Dr. Beale states that the organs and tissues of the larva of insects "are entirely removed, while new organs and textures of the imago or perfect insect are laid down afresh and developed *ab initio*, instead of being built up upon those first formed....The new and more perfect being which is evolved does not probably retain a trace of the structure of its earlier and less perfect state." If Dr. Beale merely means that by the continuance of the processes of nutrition the old material is replaced by new, we of course agree with him; but he expressly opposes

this view by stating that, although the elements of matter in the imago are of course those of which the larva and pupa were composed, they have been as completely rearranged as they would have been had they been introduced into the organism of another individual altogether, and by the further observation that by contrasting the early state and organization of the insect with that of the vertebrate, which he contends retains not only the form which it assumed at a comparatively early period, but some of the very same tissue which was active in early life, and which remains in an altered but deteriorated state. Now, taking one system alone, the nervous, does Dr. Beale mean to say that the cord of the larval lepidopterous insect, with its ganglia, and numerous branches for each segment of the body, is "utterly destroyed" and replaced by an entirely new ganglionic cord, during the passage from the larval to the imago state? That it undergoes great changes during development we willingly admit; but we cannot think that either in this system or in the digestive the change is so complete and radical as Dr. Beale appears to think.

The sections on Cartilage and Bone are good, the formation of the lacunæ and of the canaliculi, and the growth of bone, being particularly clearly and intelligibly given; and here, as elsewhere through the work, the illustrations are excellent. The views of Kölliker and Virchow are given, and shown to be erroneous. Dr. Beale wholly denies that processes can grow out from cells. The lacunæ are the spaces which, in the growing and living bone, contain oval masses of bioplasm. This living matter requires channels for the transmission of nutrient matter to it, and for the passage away from it of fluid deprived of its elements of nutrition and earthy salts in the opposite direction. The soft matrix of the cartilage is everywhere permeated by these fluids; but as its calcification proceeds, the area of the tissue which is permeable becomes more and more restricted, until at last the only permeable texture which remains in the bone is that thin portion which lies between the globules of calcareous matter. These lines being continually traversed by currents of fluid, the deposition of calcareous matter is prevented, and free channels (the canaliculi) for the conveyance of the nutrient fluid are thus retained. The illustrations, many of them tinted, displaying these points are remarkably well done, and render Dr. Beale's views perfectly intelligible.

We must really, however, protest against the extreme tardiness with which this part has succeeded the first. If we remember rightly, the first part appeared in the autumn of 1866, and consequently four years and a half have elapsed since its publication; yet the present part only contains 150 pages, a considerable portion of which was in the old edition, whilst another and by far the largest part of the new matter has been long before the world in one or other of Dr. Beale's numerous essays and lectures. Speaking honestly, we think two or three months' steady work might have enabled Dr. Beale to make all the additions that occur; and if the subsequent parts do not appear with greater rapidity, most of the present generation will be in their graves before Dr. Beale has reached the subject of Development, which forms the last chapter of the old work, itself occupying sixteen years in its issue.

Pauperism; its Causes and Remedies. By HENRY FAWCETT, M.P., Professor of Political Economy in the University of Cambridge. London: Macmillan.

IT must be acknowledged that Professor Fawcett's book on Pauperism is a complete exposition of the subject from a simply theoretical point of view. We have, in fact, a reiteration of the objections to out-door relief made by the Royal Commission of 1830, and of the population theories of Malthus, which, however true in the abstract, have never yet been acknowledged by practical people as being a cause of pauperism. It is odd indeed, and shows the theoretical nature of the work before us, that in the whole volume there is not a single mention made of the connexion between sickness and pauperism, or between the rate of wages and ill-health. A great deal is said of the demoralising tendency of ill-considered charity and ill-administered out-door relief. But there is no mention whatever of the tendency to idleness induced by prolonged starvation, or by imposing objectionable obstacles to requisite relief. The Professor seems to think that we have nothing to do but to let the labourer starve who happens to be out of work, or offer him the workhouse, which he will not accept,—apparently ignoring the fact that it is the cruelty of this mockery which has excited the sympathy of the benevolent, who, in London, have replaced during the last thirty years what should have been a just allowance by excessive and ill-considered alms. So, again, Mr. Fawcett speaks of population as if it were an evil in itself. But he altogether fails to prove that the time has arrived when, having so many honest, healthy, and industrious workmen whom we cannot employ, it is desirable to check their numbers; whilst he ignores the real truth, that the mass of paupers of whom we so much complain consists of persons whom under no circumstances whatever could we employ profitably. He speaks of the possibility of putting physical restraints on marriage as if the pauper were an animal by whom physical restraints are felt, forgetful of the law which makes it certain that the poorer and more wretched the people the faster will they propagate. And so, in proposing education as a remedy, Professor Fawcett again ignores the difficulty from the physical point of view. He seems to forget that food, shelter, and clothing must be provided by someone before education can begin. He objects to the boarding out of pauper children because they will obtain too much. He complains of all assistance in the shape of out-door relief. He even denounces gratuitous education in the schools, all because he is afraid of diminishing parental responsibility. But he forgets that society has lost faith in drunken, idle, and dissolute parents—that we have been driven into the adoption of public education by the costliness of ignorance and crime, caused by the absence of parental responsibility. The Professor has yet to learn that the laws of life are such that he cannot deal with the mind without dealing also with the body; he must feed the one whilst he educates the other. He may safely forego his population fears if he can make men healthy and industrious, for he may be assured that the time is very far distant when the sphere of profitable employment will everywhere be closed to them.

Lectures on Obstetric Operations, including the Treatment of Hæmorrhage, and forming a Guide to the Management of Difficult Labour. By ROBERT BARNES, M.D. Lond., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery and the Diseases of Women and Children at, St. Thomas's Hospital; Examiner in Midwifery in the University of London, the Royal College of Physicians, and the Royal College of Surgeons, &c. Second Edition, revised and extended. London: J. and A. Churchill. 1871.

ON the appearance of the first edition of Dr. Barnes's volume of lectures we expressed our high opinion of its value. We have now to do little more than repeat that opinion, and to express our pleasure at the proof of the soundness of it in the need for a new edition in little more than a year from the time of the publication of the first. There are several important additions, such as the treatment of prolapse of the umbilical cord, asphyxia of

the new-born child, artificial respiration, retroversion and retroflexion of the gravid uterus, prolapsus and hypertrophic elongation of the uterus in pregnancy and labour; the complication of pregnancy and labour with tumours, extra-uterine gestation, condylomata, and retro-uterine hæmatocele; the chief deformities of the skeleton, causing dystocia, describing the rachitic, osteomalacic, spondylisthetic, kyphotic, and obliquely ovate pelves; and rupture of the uterus, vagina, and perineum. Twenty new wood engravings also are added in illustration of these subjects.

Such a work as Dr. Barnes's was greatly needed. It is calculated to elevate the practice of the obstetric art in this country, and to be of great service to the practitioner. Dr. Barnes never forgets the authority of nature, and aims at basing all obstetric proceedings on an imitation of natural processes. It is impossible to read his lectures without attaining to a deeper knowledge of the physiology of labour, and at the same time acquiring a juster view of the value of the various resources of practical midwifery. Dr. Barnes speaks on the strength of a very large personal experience, and of a minute knowledge of the work of other obstetricians, of both British and foreign schools, of which he makes ample acknowledgment.

The new parts of the book are perhaps less original than many of the important chapters of the first edition, and there is a little excess of Greek in them; but they abound in suggestions of great value, and make the work more nearly complete as a guide in obstetric operations.

Remarks on Diabetes, especially with reference to Treatment. By WILLIAM RICHARDSON, M.A., M.D., M.R.C.P. London: H. K. Lewis, Gower-street.

THIS is a small book of some 120 pages, which may be called, we suppose, a medical autobiography. The author has suffered from diabetes, and, according to his own evidence, has cured himself. The history, symptoms, causes, course, diagnosis, prognosis, nature, and treatment of the disease are all set forth in an industrious compilation. The author records that "practically, so far as sugar and starchy substances are concerned, there are three types of diabetes. In the first, by the total suppression of these substances, all sugar disappears from the urine, and this state of things generally continues so long as the diet is restricted. In the second, the sugar is only diminished, and this diminution is often temporary. In the third no effect is produced." Diffuse and discursive observations occur on the properties of various mineral waters, and the spring at Tunbridge Wells (which, by the way, contains about ·8 grain of iron in a pint) comes in for a large meed of praise. All plans of treatment hitherto suggested appear to have failed with Dr. Richardson. "I then," he records, "determined to take tincture of perchloride of iron and chlorate of potash; to continue to walk regularly and persistently every day; to wash all my body daily with lukewarm water, using plenty of soap, and exposing my body as much as possible to the sun; to take a soda bath twice a week, and to clothe in flannel. After three months I was free from sugar, and have been so ever since." We have quoted, *in extenso*, the two most original paragraphs of this book, leaving our readers to judge as to how far it may be worth their while to peruse the train of remarks from which these conclusions are derived, and we are glad to congratulate the author on his restoration to health.

Tarasp, and its Mineral Waters. From the French of Dr. KILLIAS. Compiled and Edited by the Rev. N. B. WHITBY, English Chaplain at Tarasp. Third Edition, with Map. London: T. Bosworth. 1871.

WE commend this little work to the notice of those practitioners who are casting about for a suitable continental health-resort, during the coming season, for those of their patients who are suffering from organic diseases of the more important internal organs, rheumatism, and such-like complaints. A year or two since Tarasp, now one of the most rapidly rising spas in Europe, was scarcely known in this country; and it was not till the neighbouring place of St. Moritz in the Upper Engadine became so much in vogue that the English public and physicians became acquainted with the important springs in the Lower Engadine, in the vicinity of Schuls, long noted on the Continent. The book contains all necessary information as to routes, hotels, and other matters of interest, with an excellent map of the surrounding districts. Instead of dealing with the medical part of the subject, as too many clergymen might be sorely tempted to do, Mr. Whitby has wisely contented himself with reproducing in full the views of able medical men as to the nature of the waters and their therapeutic virtues.

THE RIVERS POLLUTION COMMISSION.

THE third report of the Commission, lately issued, deals chiefly with such pollution of rivers and streams as arises from the woollen manufacture, and processes connected therewith. In regard to this specific pollution, the problem to be solved differs from that which is involved in mere excremental pollution, trade interests of large magnitude being concerned with the former. And had it been proved that the successful prosecution of an important branch of industry like the woollen manufacture was inseparable from an unrestricted right on the part of the towns in which it is established to cast into the adjacent rivers all and sundry the refuse of the manufacture, not even a Royal Commission could have hoped to restore those rivers to purity. But happily the Rivers Commission is able to come to the conclusion that "the agricultural remedy is probably as efficient against nuisances of this kind as it is in the case of town sewage." As regards solid refuse (cinders, ashes, spent dye-woods, &c.), which in large measure chokes up the channels of rivers and streams in manufacturing districts, the obvious remedy is the absolute prohibition, under heavy penalties, of such an abuse of river advantages. The remedy for sewage pollution has long since been settled in the minds of the Commission, and they but reiterate in this report arguments they have urged before in favour of irrigation. And now, it seems, the same remedy is applicable to the pollutions resulting from manufactures—namely, that caused by waste liquors from scouring and dye-vats, and from wool, yarn, and piece-washing. All these liquors possess an agricultural value, the stronger of them having a much greater fertilising power than ordinary London sewage. It is, in fact, the opinion of the Commission that the best and most profitable mode of cleansing the foul liquid of woollen factories will be their application to land, and that their utility for this purpose would be greatly increased if they were previously mixed with several times their volume of town sewage. Practically, then, all manufacturing towns which have solved their sewage problem by the adoption of the irrigation system, may at once solve the manufacturing liquid refuse problem by simply turning that refuse into the sewers, whence it passes on to the soil, which it helps to render increasingly productive. For places where there are natural or pecuniary difficulties in the way of the irrigation system being adopted, the Commission give an alternative method for disposing of both sewage and manufacturing refuse—namely, by intermittent filtration through porous earth. The drainage of a town of 10,000 people would require at least 100 acres for the cleansing and profitable utilisation of the sewage by irrigation, whereas the Commission say that it would need but three acres of a porous medium six

feet deep, worked as an intermittent filter, to oxidise, and therefore purify, the drainage-water of such a town, "provided the mass of earth through which it percolated were frequently and effectually aerated, and the foul liquid were so added that every part of this aerated filter had its equal share and equal interval of aeration." It ought to be stated that this conclusion is based rather upon laboratory experiments than upon its practical working out on any adequate scale; and the Commission, while they express themselves satisfied as to the "satisfactory and permanent efficacy" of this remedy, are evidently not without misgivings lest such an apparatus, on the scale needed for a large town, would prove "a formidable nuisance," the corresponding advantage being that "the water running from it would be sweet and clean." The wisdom of purifying the water at the cost of polluting the atmosphere is to our minds open to question.

We have space only to notice one other feature of this report, and that is the recommendation of the Commission that all rivers and streams in England should be placed under the superintendence of a central authority or board, with whom the general conservancy and prevention of pollutions and the surveillance over all matters of water-supply should rest. Now something of this sort seems to us most necessary if we are ever to have systematic river-pollution put a stop to. It can only be from the fact that at present it is "nobody's business" to keep river conservators and water-side local authorities up to their duties, that, notwithstanding the Thames Navigation Act of 1866 made it illegal henceforward to pass town sewage into the Thames, a Select Committee of the House of Commons has just sanctioned a Bill promoted by the Richmond vestry, giving that town the privilege for three years to come to discharge its sewage into the Thames. If Parliament allows this Bill to pass we may expect other towns on the Thames to follow suit, and thus the water-supply of the metropolis will suffer a great, it may be a fatal, deterioration in quality. What is the use of Royal Commissions and Acts of Parliament if it be permitted to an insignificant local authority to set them all aside according to its convenience?

Foreign Gleanings.

ULCERS OF THE CERVIX UTERI.

M. DESPRÉS, surgeon to the Paris hospital for women affected with venereal diseases, has published a book on the above subject. The work has been succinctly analysed in the *Montpellier Med.*, April and May, 1871, and the reviewer quotes from the work the following passage, which is worth attention:—"The diseases of women have often proved a rich mine to certain authors, and the extensive practice derived from their writings has mostly been founded on the use of some new agent, hence the many remedies which have been proposed. On the other hand, we find unbiased men giving an account in their works of the therapeutical means which have been extolled, registering failures and occasional success. I am anxious to state my belief that the latter depends mostly on coincidences, and that the cures might have been obtained by other means. It should be remembered that most specialists in the diseases of women use but one mode of cure; such as the red-hot iron, lunar caustic, and more or less concentrated solutions of the latter; all, however, curing ulcers of the cervix in about the same lapse of time." M. Després ignores all internal remedies, and relies on topical applications. He considers, however, that complete continence, cleanliness, an occasional cauterisation by any agent, are very efficacious, especially when patients are treated early, and subjected to constant control. The author adds that he has found the *plug* very useful, and gives the following description of it:—Take a small piece of coarse gauze, in which a pledget of cotton wool is placed after it has been filled with about 15 grains of powdered alum. Fold the gauze over the wool, and tie the ends of the former with a thread five or six inches long, which is allowed to hang out of the vagina to facilitate the removal of the plug. The latter should remain twenty-four hours.

HYPODERMIC INJECTIONS OF SUBLIMATE IN SYPHILIS.

Dr. Hagens has published an important article on this subject in the *Ungar. Med. Presse*, No. 38, 1870. The author thinks that the injections have met with undeserved praise and blame. To settle the matter, he applied the method extensively, both in private and hospital practice, for about fifteen months. Full and very interesting details are given, the author finally laying down the following propositions: 1. The opponents of this method have unjustly taxed it with inefficiency and harmfulness. 2. These injections are superior to all other kinds of mercurial treatment, on account of their rapid results, the small and regulated doses required, the non-interference with the digestive organs, and the possibility of allowing the patient to go out (with some restrictions as to diet). Relapses after the hypodermic method are not more severe than with other modes of using mercury, nor are they so numerous. 3. This method is relatively powerless as regards some symptoms, especially affections of the mucous membrane of the oral and nasal cavities, and psoriasis palmaris. Nay, the injections may give rise to these scaly eruptions when relapses take place, and a combination of this method with others is then advisable. 4. The hypodermic treatment should, therefore, not be regarded as the only mode of using mercury and applicable in all cases, nor can the result be always fully guaranteed. But the method may be recommended for more extensive application than it has hitherto enjoyed, without excluding the other means of introducing mercury into the system.

SAPONIFIED COD-LIVER OIL.

Dr. Van den Corput, of the St. John's Hospital, Brussels, has advocated for some time a combination of hydrate of lime with cod-liver oil in tuberculosis. He directs the preparation of boluses wrapped in gum and sugar in the following manner:—Pure cod-liver oil, thirty drachms; make a soap with hydrate of lime of the consistence of pills, and flavour with essential oil of bitter almonds, or oil of aniseed, fifteen minims. Let the boluses weigh from four to five grains, and protect them with a mixture of one part of powdered iris root and three parts of powdered sugar. The boluses may also be wrapped in ethereal tincture of tolu. The patient may take from six to eight per diem, two at a time, immediately *after* meals. To this calcareous soap a salt of morphine, or extract of aconite, or extract of henbane, may be added, as well as any other substance which the medical man may think indicated in a particular case.

DESTRUCTION OF THE ANTERIOR LOBE OF THE BRAIN; NO PARALYSIS.

A man, aged thirty-two, was struck, from a height of 25 yards, by a heavy pail, which shattered the skull and drove out brain-substance. The loss of splinters and cerebral matter for the next few days was very considerable. The mind remained clear, and the limbs could be freely moved. No notable change occurred until the sixteenth day after the accident, when the patient died of exhaustion. The right anterior lobe was almost entirely gone, and the middle lobe, on the same side, was found compressed by a flattened and hardened clot. M. Letenneur, the patient's surgeon, does not say whether the man had any difficulty in articulating. This is an omission much to be regretted.

LOCAL ANÆSTHESIA.

Dr. Spessa states, in the *Bulletin des Sc. Med.* (Italy) that he has succeeded in preventing pain, during the slitting of a fistulous tract, by injecting a solution of morphine into the tract before the use of the knife. The same author had occasion to touch the vulvar vegetations of a girl with butter of antimony: the pain was very acute, but disappeared on the part being brushed over with a solution of morphia. A boy of fifteen, suffering from hip-joint disease, required an issue over and behind the great trochanter. An injection of morphine was first made over the region, and Vienna paste applied, which latter remained about eight minutes. The paste did not give any pain. Dr. Spessa states that he would be glad to hear that a fair trial has been given to this mode of using morphia.

VACCINATION EXPERIMENTS ON CATS AND DOGS.

Drs. Horand and Peuch publish, in the *Lyon Médical* (March 19th, 1871), a series of experiments in this direction; and they find that both cats and dog are insusceptible of the development of vaccine lymph.

THE LANCET.

LONDON: SATURDAY, JUNE 10, 1871.

THE second reading of THE LANCET Bill is fixed for Wednesday next. Without being over-sanguine of the passing of a measure on a subject which excites little enthusiasm in Parliament, and on which her Majesty's ministers have made an ineffectual attempt to legislate, we are anxious again, and at the last moment, to place before our readers a few of the considerations which induce us to urge them, by petitions to Parliament, and in personal communications with their representatives, to support the essential proposals of THE LANCET Bill—namely:

1. A Medical Council that shall represent the Crown and the medical profession equally with the medical corporations.

2. Three perfectly independent examining boards, one in each division of the kingdom, to be elected by the Medical Council, to be responsible to it alone, and whose examinations shall constitute the one portal to the profession.

The question of the Medical Council is very important. The profession is unanimous in thinking that there ought to be some representation of itself in the Council. Statesmen like Lord GREY think so. Many members of the Council itself, such as Sir DOMINIC CORRIGAN and Dr. ANDREW WOOD, are of the same opinion. The President of the General Medical Council, Dr. PAGET, speaking for himself and several of his colleagues, has been careful lately to state that they have been misrepresented in the matter of the representation of the profession in the Council; and Dr. PAGET has certainly voted, in the Council, for an indirect representation of medical practitioners. THE LANCET Bill—or, to speak in parliamentary language, the Bill introduced by Dr. LUSH—provides for the representation of the profession. But it does more than this. The proper disposal of questions in the Medical Council is hindered by the excessive representation of medical bodies in it. The representatives of no less than eighteen bodies have to be heard before any serious resolution affecting education or examination in medicine can be passed. The interest of the majority of these bodies consists in passing candidates and receiving their fees, and their temptation is to oppose measures for improving the character of the licensing examinations. Satisfactory rules for the regulation of education and examination in medicine cannot be expected from a body so constituted. We cheerfully admit that many of the individual members would make any personal sacrifices to secure a higher standard of education in the members of the profession; but in the Council they represent bodies which must pass men in large numbers, or they fancy themselves unprosperous. THE LANCET Bill abolishes the individual representation of the medical bodies, and requires these to amalgamate for the election of representatives.

We come now to the second great feature of THE LANCET Bill—the clauses which devolve upon the Medical Council the duty of electing a Board of Examiners in each division of the kingdom, to consist of examiners chosen purely on the ground of their acquaintance with the subjects in which they are to examine. All other Bills than that of THE LANCET have provided for the new examining board by a system of amalgamation of the nineteen bodies which now confer licences. We, on the contrary, would make the new examining boards entirely independent of the corporations, and responsible only to the Medical Council. We are of Mr. CHARLES HAWKINS'S opinion that "the day for conjoint examining boards has passed away." To devolve upon eighteen or nineteen bodies the election of three examining boards is to embarrass the election with all sorts of collateral and irrelevant considerations; to introduce supposed claims of interest, of priority, of seniority, where only the claims of the public, on the one hand, and of men competent to examine, on the other, should be considered. These bodies want to have the power of appointing the new boards which alone are to confer a licence to practise, and the power to confer their own various qualifications. We desire, on the other hand, three good examining boards, altogether untrammeled by corporation influence, and elected by an independent body. We want a body of examiners for licensing purposes, selected as independently, and as simply on the ground of their fitness, as the examiners of the London University, or the examiners of the Army and Navy Boards. Of course such a proposition provokes the opposition of the present licensing bodies, as Mr. FORSTER very simply and very superfluously has explained. If these bodies are to be considered, things will remain as they are; and we shall have further exposures from Dr. PARKES of the ignorance of men who have passed two or three of them. Why should the supply of this need of a new licensing examining board be delayed and hampered by making nineteen bodies responsible for it, each of which considers itself the constitutional and heaven-appointed depository of examining wisdom and patronage? We know enough of the difficulty of forming conjoint boards, and of the unsatisfactory working of them when they are formed, to commit the one-portal examination of the future to them.

We urge upon all who share our views to forward a petition to Dr. LUSH before Wednesday next in support of THE LANCET Bill. It may not become law this session; but it is of the highest moment to the profession and the public that its proposals should be the basis of the next legislation. The profession is rising daily into a higher importance in the State and in society and in science. And we owe it to ourselves and to the public to perfect, as far as may be, the gate of admission.

THE character of the examination for matriculation, at the University of London, has lately attracted a considerable degree of attention among those who are interested in the higher education of the middle classes. The average number of rejected candidates amounts to about fifty per cent. of all who present themselves; and it has not unnaturally been felt that this percentage appears to indicate that too much is demanded. There seems reason to believe

that the failures are greatly due to two subjects only—chemistry and natural philosophy; and it is said by some that they are also mainly traceable to a want of consonance between the teaching of ordinary schools and the requirements of the examiners. On this ground it is held to be the business of the schools to reconsider their methods and their curricula; and the University, both in Senate and in Convocation, has decided to maintain all the essential characters of the existing examination, and to modify it only by giving a larger number of questions in certain subjects, together with a choice as to which of these questions, up to a given number, shall be answered by the candidate. It may therefore be regarded as the deliberate decision of the authorities that the present examination shall remain practically unchanged; and it is said that it is even regarded as a sort of filter, by which unpromising young men will be excluded, and only those of a high order of ability will be permitted to proceed to the ultimate tests of the examinations for degrees.

The benefits already conferred by the University of London upon the public, together with the high character and the manifest desire to do what is best of those who rule over it, render it necessary to regard their decisions with respect, but at the same time do not by any means exempt them from criticism. In this particular instance we feel sure that the decision is unsound in principle, and that it cannot fail to be injurious in practice. Boys are admitted to examination at the age of sixteen; and they are required to give evidence of considerable attainments in a great many branches of knowledge. But, up to the age of sixteen, the object of education is by no means to confer attainments. It is, or at least ought to be, almost confined to the exercise and development of the faculties of the mind; and this, with many boys, can be better accomplished by the agency of two or three branches of study than by a dozen. The University authorities say that the boys who, at sixteen, most distinguish themselves at matriculation, grow into the men who take the best position at subsequent examinations. This may be very true, but it in no way affects the question. Our position is that the boys who are excluded may be better raw material, and in every proper sense better educated, than those who pass; and that the present system tends to attach an altogether unwarrantable importance to a superficial extent of attainment, to the practical exclusion of depth of culture. We hold it to be altogether impossible to prepare a boy for this examination by a very high class of teaching; and we believe that the preparation actually is, in the great majority of cases, not education at all, but cramming. Given good natural abilities, with a desire to excel, and the boy may afterwards thrive mentally in spite of the cramming; but what will happen when the cramming fails? What will happen in the middle-class schools in which the demands of the University give the tone to the teaching? When adult age is reached, there is very much to be said in favour of a more widely embracing mental effort than is at present common; but the object of training is to bring about the accurate accomplishment of certain mental processes, not the storing up of a vast aggregate of statements. And here we arrive at what we conceive to be another flaw in the system—namely, that the examination is, in some of its parts, an examination in the opinions of particular men. It is doubtless harmless to know Mr. SMITH's notion about a chemical change, or Mr. BROWN's view of the construction of a sentence; but it is an error to mistake such knowledge for education, or to accept it in lieu of an acquaintance with the principles at issue. Still more is it an error to suppose that anything which is learnt before the age of sixteen is of any subsequent value *quoad* knowledge; or of any value at all, except as an instrument of education. Chemistry, well understood, is a science of the highest possible utility, both to its professors and to mankind. But a smattering of chemistry, gained before the age of sixteen, is of no conceivable use to anybody. A man who is to become a chemist should commence his special training at a later period; and one who is not to be a chemist will have the chemistry of the pre-matriculation time swept clean away from his mind. In the meanwhile the demand of the University has produced chemical teaching in schools. The result is, as lately stated by "A Father" in *The Times*, that a boy "can rattle off a lot of chemical formulæ, a feat about as useful as remembering those plagues of our early days, the Kings of Israel and Judah, and he can perform a few experiments which are of no earthly use to anybody but the carpet manufacturer, who sucks no small advantage out of the spilling of acids."

For the purposes of a filter, moreover, the matriculation is not the right examination to select. From any national point of view it would be better to place the filter at a further point of the academical course, and to give the benefit of training even to some on whom, after all, the University might not set its stamp of currency. But the great point would be to recognise that surface may have more than its equivalent in depth, and hence to place a high degree of proficiency in a small number of subjects at least on a level with the requirements of the present examination. It would be easy to devise a system of marks by which a certain total might be gained either from all the subjects or from some of them; and such a plan would at once relieve the University from the charge of excluding boys who would do it credit, of laying down hard and fast lines of requirement, or of developing a system of cramming in middle-class schools. The latter is a vice which needs no fostering, and which bears to education the relationship that sign-painting bears to art.

IT is a pity that such a subject as the prevalence of phthisis in Australia should be treated in any other spirit than the strictly scientific one. Yet such is the case. In the first instance, there was a disposition to exaggerate the climatic virtue of Australia, and to laud it as a wonderful cure in cases of phthisis. Statements and representations were made on this subject characterised by an absence of the moderation and caution which should distinguish medical opinions on such a serious matter. On the other hand, these statements have called forth refutations which, though very suggestive of the existence of unhealthy influences in Melbourne and its neighbourhood, and showing the actual existence of a large amount of phthisis in parts

of the colony, yet still do not amount to satisfactory proofs that the Australian climate, at least in some parts, is not a good one for some cases of phthisis, and which are unfortunately characterised by a certain *animus* and a tendency to moralise which always lessen the value of a scientific work, and which are especially unsuited to a writer who thinks that he stands on a sure basis of statistical facts. We may the more candidly express our opinion of the faults of Mr. THOMSON's arguments on this subject, as we in the main agree with him in thinking that the anti-phthisical virtues of Australia have still to be demonstrated, and think that he has done great service in bringing forward evidence that phthisis is a common cause of death, even in those who have resided for a considerable period in the colonies. All we desire is that he should forget the personalities of this controversy, and treat it as one purely scientific, and yet hugely important to both the public and practitioners.

In his book last year, Mr. THOMSON averred the existence of a large amount of phthisis in the Melbourne districts: that, with an area of 165,000 acres and a population of 180,000—in other words, 700 inhabitants to a square mile,—there was in March, 1870, a higher mortality from phthisis than in London, with its population of 25,000 to every square mile; moreover, that the mortality from phthisis was increasing, and amounted to one in three of the deaths of adults, as in England. Mr. THOMSON properly laid great stress on the large number of victims following confining or domestic employments, and on the unhealthy surroundings of Melbourne, especially the 3000 acres of lagoon, morass, and quagmire between the city and the sea, which receive a large amount of the town sewage. The statements of Mr. THOMSON were confessedly based on defective data. Nevertheless they justly excited a great amount of attention, and further data were ordered by the Legislative Council, in the shape of returns from the Registrar-General of the numbers who had died from phthisis in Melbourne and its suburbs during the years 1865—69 and the first half of 1870; specifying the district, sex, age, occupation, place of birth, duration of illness, and period of residence in the Australian colonies. Mr. THOMSON finds in these returns for five years and a half, 2143 deaths from phthisis in a population of 170,000, and considers them amply to confirm his opinions as to the prevalence of phthisis in Melbourne. But his tables compiled from the returns seem to us far from perfect. For example, in the first table of 2143 cases the duration of the illness was unknown in 754, or in more than a third. For aught that appears to the contrary, the disease may have existed before the arrival of the patients in the colony. The existence of a notion that the Australian climate is curative of phthisis has confessedly led to the influx of an unusually phthisical population; and this circumstance vitiates, and will for some time continue to vitiate, conclusions as to the effect of the mere climate of Australia. In the second table, it is true that Mr. THOMSON excludes those cases the duration of whose illness is unknown. Out of 1167 cases, excluding those born in the colony, he finds that 229 had lived between five and ten years in the colony, that 433 had lived between ten and thirteen years, 230 between fifteen and twenty years, and 101 had lived between twenty and thirty years; in short, that about 1000 of 1167 where the duration of the illness was known had lived over five years in the colony. The inference drawn from this is that the climate had not saved them from dying of phthisis. But we should have to know a great many more facts before we can be sure that the colony or the voyage to it had actually been of no climatic service to them. It may still be reasonably argued that these served to keep them alive and avert the break-down. Then these statistics are deficient in regard to the facts of population, and in regard to the number of persons emigrating to Australia distinctly on account of phthisical tendencies or phthisical disease. It is quite possible that such emigration is part of the explanation of the slight decline in the mortality from phthisis in England, and the slight increase of it in Australia. Moreover, we really should like to know more of the effect of the voyage and the climate on individual cases. Mr. THOMSON will find in his favourite ALISON authority for thinking much of good observation of individual cases of disease, about which there is an accuracy that does not attach to statistics. Finally, these returns apply only to Melbourne and its suburbs—not to the Australian colonies generally.

Notwithstanding, however, that we think the statistical data in this question not supplied by Mr. THOMSON's tables, he has done enough to condemn all careless faith in the climate of Melbourne as a cure for phthisis. We must really pause before sending patients so far away, unless they are in the very earliest and most inactive stages of disease, or have shown only tendencies to disease. The mortality from phthisis in the hospital of Bendigo is not very different from that of the Melbourne hospital, though in the former locality there is fresh air, open-air work, and food. Unless this is imported phthisis, or there is something in the *morals* of emigrants favouring the occurrence of phthisis, it would almost seem as if the climate favoured its production.

WE avail ourselves of the recent conference on the constitution and management of Friendly Societies to offer a few remarks on the subject of medical attendance on sick members, and the methods of remuneration which have been generally adopted. The matter is of great importance. The affiliated orders of Odd Fellows and Foresters alone embrace upwards of 800,000 members, who do not pay less than £150,000 a year amongst them for medical attendance and medicine. Some time back there was a very general objection to the rate of pay; and attempts were made, not altogether without success, to increase the annual payment per head from three shillings to four or five shillings a year. But even if the highest sum were generally obtained, it will scarcely be denied that there are very serious objections to the contract system. In the first place, it partakes too much of a strictly trade character to be entirely satisfactory to professional men. The member pays his three, four, or five shillings, as the case may be, and he expects to get his money's worth in the course of the year. He consequently consults his surgeon upon every trivial occasion; sends for him either by night or by day, with little consideration for his convenience or health; expects to be supplied with an

unlimited quantity of the most expensive medicines; and is ready to bring a complaint before the Society, or the Lodge, if his whims and fancies are not fully gratified. Nor is the system calculated to generate that thorough confidence which should exist between doctor and patient. There is too much opening for suspicion that the attendance is regulated rather by the rate of pay than by the requirements of the case. There is no provision for extra trouble caused by tedious cases and the prevalence of epidemics; and, above all, there is an absence of that acknowledgment of personal obligation which is best expressed by fees.

Such being the case, we listened with very great interest to the mode of payment proposed by the Hon. and Rev. S. BEST, of Abbots Anne, Andover, the projector of Friendly and Provident Societies established on the deposit principle. The members of these societies, instead of paying their medical attendants a definite sum annually per head, have an arrangement under which they pay them special fees. For example, the Surrey Deposit Friendly Society issues tickets which are in reality drafts upon the treasurer. The scale of payments is as follows:—

"In medical cases:—Visit, with medicine for two days, 2*s.* 6*d.*; if beyond three miles, 6*d.* per mile extra. Members entitled to over 2*s.* daily sick pay, 6*d.* per visit extra. Attendance at surgery and medicine, 1*s.* 6*d.* Fresh supply of medicine for two days, 1*s.* In surgical cases:—Compound fracture of the thigh; compound fractures or compound dislocation of the leg; amputation of leg, arm, foot, or hand; or the operation for strangulated hernia, £5. Treatment of simple fractures or simple dislocation of thigh or leg, £3. Removal of cancerous or other tumours of some magnitude, £3. Treatment of dislocations or fractures of the arm, £1. Fracture of clavicle or ribs, £1. Dislocation of lower jaw, amputation of fingers or toes, or removal of small tumours, 10*s.* 6*d.* Passing catheter, 2*s.* 6*d.*; if at patient's home, 2*s.* 6*d.* extra. No amputation or important operation to take place (if time permit) without a consultation with another medical officer, whose fee shall be £1. The rates in surgical cases to include all kinds of appliances, apparatus, splints, and medicine, as well as attendance for one month; and if the patient dies within thirty-six hours from time of treatment, the charge to be reduced one-half. Members are at liberty to send for any medical practitioner approved by the Central Board and accepting this scale of fees; but, unless the *nearest* medical practitioner is employed, the extra mileage must be paid by the member out of his or her own deposit."

On reference to the rules it will be found that these fees are partly provided by a common fund, to which every member of the Society has contributed according to a given scale, and partly by a private fund belonging to the individual who requires help. Thus, instead of paying his 5*s.* annually to the doctor's fund, he deposits his savings with the Society—say to the same extent,—and it having been found by the year's experience that 3*s.* would be required to pay the medical fees, each member of the Society would be required to contribute that amount to the common fund, the remainder being regarded as a private deposit, to remain the property of the individual if he did not happen to require attendance in any part of the year. Should he be taken ill, he would give a ticket to any medical practitioner who is willing to attend him, and the value of the ticket is recouped partly from the common fund, and partly from the private deposit previously described. Thus when a home visit is required, the fee is 2*s.* 6*d.* Of this sum three-fourths is contributed by the Society, and one-fourth by the individual; so that every member has a direct interest in not troubling the medical officer when there is no occasion. And the medical officer is paid on a scale suitable to the means and position of the applicant, and according to the amount of work. This mode of payment has many other advantages. It is most important that the labouring man shall be able to change his Lodge or locality; but it is extremely unfair to expect the medical man to take the same fee for a new-comer of fifty years of age as he would for one of twenty. But under the fee system the man at fifty will probably have a deposit accumulated during years of health which will enable him to pay the fees for the extra attendance he will be likely to require. In fact, the system of payment by tickets per visit removes the many just and reasonable complaints which may be made against the contract system. The deposit mode of payment gives satisfaction to many medical men in all parts of the country. It is to be found in villages in North Wales, Leicestershire, and Gloucestershire; and there are county Societies in Wiltshire, Hampshire, and Surrey. It appears to us on every ground to be the better mode of remuneration; and we would urgently recommend it to the medical officers of Clubs and Friendly Societies for general adoption.

Medical Annotations.

"Ne quid nimis."

THE CONJOINT EXAMINATION SCHEME.

THE committee appointed by the London licensing bodies to confer together with the view of promoting a scheme for "a conjoint examination" met on Monday last. Whilst a general agreement appears to have been arrived at with reference to many of the details proposed in the scheme of the College of Physicians, a distinct hitch has occurred with reference to one of the most vital points of the same—viz., that which relates to the appointment of examiners,—in consequence of the opposition of the College of Surgeons. It will be remembered that the College of Physicians proposed that "a committee of examinations" should be formed, to consist of the representative of each university in England, two of the College of Physicians, of the College of Surgeons, and of the Apothecaries' Society respectively, whose duties should be to decide as to the number of examiners, to nominate such examiners for appointment by the several universities and licensing bodies, and to transact other business connected with examinations. The College of Surgeons will not agree to this, but suggests that the superintending board should be constituted of examiners, or of examiners and assessors appointed by the several licensing bodies, as suggested by the College of Physicians; but then demands that the examiners should not be appointed (or nominated) by this committee or board, but directly by the licensing bodies themselves, the College of Surgeons appointing examiners in Surgery exclusively, and also in Anatomy and Physiology and Midwifery, the number of examiners in any given subject being determined by the licensing bodies

themselves, and the Presidents of the Colleges of Physicians and Surgeons, the Master of the Apothecaries' Company, with a representative of each licensing body in England, together forming a "committee of reference," and to act as visitors of examinations. The object which the College of Physicians and the universities had in reference to this matter was to secure the services of the best examiners, who should be appointed by an independent board, and not by the licensing bodies themselves; but it will be seen that the effect of the plan advocated by the College of Surgeons, which professes to be unable to agree to the proposed alterations on account of the provisions of its charter, will be that the Council of that body will appoint themselves examiners, and the existing abuses that flow from that system would be perpetuated. If the College of Surgeons is in earnest in desiring "a conjoint examination," it will be an easy matter for the Council to obtain the powers they profess not to possess by a short supplemental charter.

On one other point we hear that a difference of opinion exists between the licensing bodies, for the College of Surgeons suggests that anyone who passes the conjoint board examinations should be entitled to the licence of the College of Physicians, the diploma of Member of the College of Surgeons, and the certificate of the Apothecaries' Society. The College of Physicians, it may be recollected, thinks that the successful candidate should have either the first two or the last two. However, as there seems likely to be a good deal of quarrelling in one quarter over the question of loaves and fishes, the conjoint scheme must be regarded as only looming very far in the distance. The attitude of the universities remains the same. Whilst they have nothing to gain by the adoption of a conjoint examination, they are willing to concede something for the general good, and—at least in the case of the University of London—to defer the granting of the M.B. degree until the candidate has passed the final examination of the conjoint board; that is, to make such arrangements in their regulations as will prevent the holders of the degrees being registered (for they are of course entitled by Act of Parliament to registration) before they have passed the "conjoint examination." In case of fresh legislation taking place, they are willing, we believe, that none of their degrees should qualify for registration; though they would then insist upon being able to confer them without reference to the examinations of any other body or board.

WATER ANALYSIS.

LAST week we dwelt on the supineness of Government in reference to the Metropolitan Water Bill; we have now to comment on the chaotic state of science—or, perhaps we ought to say, of the official representatives of science—in reference to the subject of water-supply.

A number of years ago, a Report was prepared for the Government by Graham, Hofmann, and Miller, in which it was frankly confessed that chemical analysis, as it stood at that time, could not distinguish between water fit to drink and water unfit to drink; and in that condition water analysis remained until the year 1867, when two distinct and independent efforts were made to supply the deficiency. One of these efforts found its way into print in 1867, and the other in the year following. The former—the ammonia method, as it was termed—sought to gauge the purity of water by means of delicate measurements of the amounts of ammonia obtainable from it by certain processes, regarding the ammonia as an index to the nitrogenous organic matter actually or potentially present in the water. It was shown that good water evolved very little ammonia; that from one million parts of any of the admittedly good kinds of drinking-water only a few hundredths of a part of ammonia were obtainable; and that from admittedly bad water twice or three times as much ammonia was to be obtained. The latter method, which had the advantage of official patronage, and which, although elaborated in 1867, was not published until 1868, consisted in making *organic analyses* of water residues.

Now it came to pass that when these two processes were applied to the same sample of water, they furnished opposite results, and when the authors of the processes investigated the question of water-supply, they arrived at opposite conclusions. Whilst one recommended a water-supply "originally pure" (that is to say, of mountain or of lake origin) the other denied the purity of lake waters, and insisted upon the efficacy of proper filtration, maintaining that Thames water, efficiently filtered, would be as pure as lake water could become. No sooner was the second method laid before the Chemical Society, in the year 1868, than it was criticised by the authors of the first method, who produced that which purported to be a complete refutation of it. This was also published in the *Journal* of the Chemical Society in 1868, almost immediately following the paper descriptive of the method in question.

Method No. 1 was used by Mr. Way for the Rivers Commission in the year 1867, and quite recently by Dr. Angus Smith for the investigations under the Alkali Act, also by the late Dr. Miller for water analysis for the Privy Council. We are informed also that it is largely employed in India for government purposes. Method No. 2 is understood to be used by Dr. Frankland for the work undertaken by the Rivers Commission. It only remains to add that the authors of Method No. 1 have neither withdrawn nor modified their criticism of No. 2, but have republished it in the appendix to the first and second editions of their treatise on Water-analysis, and that up to the present date no reply has been made to them.

THE AGE AND PHYSIQUE OF THE SOLDIER.

WE are glad to find that a matter to which we have more than once adverted has at length attracted the notice of a great military authority. Lord Sandhurst, in a very effective and statesmanlike speech, recently called the attention of the Upper House to the ages of our recruits and of the men forming our standing army in connexion with the subject of the formation of an army reserve, and the supply of soldiers for our Indian and Colonial possessions. The question is one of a grave character, on which physiological considerations are capable of throwing some light. On looking at the German system of organisation, there is one point, Lord Sandhurst urged, which ought never to be forgotten by those who have to consider the elements out of which *combative* armies had to be formed—viz., the age of the men. The immature striplings recruited for our army are quite unfit for field or foreign service. It was the complaint of the first Napoleon and the experience of our own generals in the Peninsula that such men, however much they may serve to swell the nominal, add nothing in reality to the effective strength of an army. They have not the necessary *physique* or powers of endurance to sustain the work they are called upon as soldiers to perform, and we consequently find that during a campaign, or on Indian service, they speedily break down and serve only to embarrass the movements of a force by swelling its sick list. The young troops hastily raised by Gambetta during the late war were quite unable to withstand the older and hardier soldiers of the hostile army. The Germans went through their ranks like a locomotive through a flock of sheep. All medical officers agree in the opinion that regiments composed in great part of very young men, such as the Duke

of Richmond showed was the case with the 54th Regiment, now under orders for India, are unfit for tropical service; and we find that Dr. Muir, the medical head of the British Force in India, has declared that the evil had so culminated that it might be impossible to trust her Majesty's regiments hereafter. The Director-General has also strongly expressed his opinion that young undrilled men under twenty years of age should never, on the score of health alone, be sent to India. In point of fact, the growth and development of the body have not been fully attained before twenty-five. Mr. Cardwell has, however, become impressed with the necessity of attending to the views expressed by medical officers and others on this head, for we find that he has undertaken to weed regiments of their young and immature men before embarking them, and to procure older soldiers as substitutes by offering them a bounty to volunteer for Indian service. Of course we must take men when we can get them, and if they will enlist at eighteen and not at twenty, we must be content to maintain our young recruits at home until, by good feeding and training, they are rendered fit for their duties. Unless the number of soldiers of three years' service that are allowed to volunteer for the reserve be limited, it is evident that we may be organising failure for ourselves. When the formation of a reserve force was contemplated, we urged that some scheme might, at the same time, be devised for securing that all youths at our public and national schools should be compelled to undergo some kind of military training, and we still hold that such could be done with benefit to the youths drilled, and with injury to no one.

THE COLLEGE OF SURGEONS ELECTION.

IN less than four weeks' time the annual election to the Council of the College of Surgeons will be held, and the necessary formal notices have already been given. So far as we know, things remain *in statu quo* respecting the coming event, with the exception that we have to announce the name of an additional candidate for the suffrages of the Fellows in the person of Mr. Barnard Holt. Mr. Holt is a Fellow by examination of 1847, and has been senior surgeon of the Westminster Hospital for many years. His candidature cannot therefore be considered premature, and his professional reputation fully entitles him to the position he seeks. The Westminster Hospital has been remarkable for some years for having no representative on the Council of the College of Surgeons, whereas in the last generation four of its staff were both Councillors and Examiners—viz., Sir Anthony Carlisle, and Messrs. Lynn, Guthrie, and Anthony White. We hope that Mr. Holt will follow Mr. Critchett's example in laying briefly before the electors his views on College and professional politics.

With such candidates before them as Messrs. Wells, Critchett, and Holt (for Mr. Coote's candidature is a little uncertain), the Fellows of the College will have no difficulty in filling the vacancies which will be left in the Council. We look upon it as a healthy sign that candidates for the Council are coming forward whose professional and social position is such that an Examinership can form no bait to them; and both by this and by the consequent election of Examiners outside the Council, we trust that that separation of the Court into two parts, which has been long talked of but never carried out, may at length be inaugurated.

We may remind intending candidates that their nomination papers, signed by six Fellows of the College, must be delivered to the Secretary of the College within ten days after announcement of the election in the *London Gazette*.

METAMORPHOSIS OF TISSUE DURING FASTING.

AT a recent meeting of the Naturwissenschaftlichen Klasse of the Viennese Academy of Sciences, Prof. Seegen communicated a series of investigations upon the metamorphosis of albumen during fasting. The subject of his experiments was a young girl, who, in consequence of a stricture of the œsophagus, was only able to consume very small quantities of nourishment. During a whole month the daily ingesta amounted to but 35 grammes of milk, and about 20 c.c. of water. A teaspoonful of this mixture was taken at intervals of about an hour. After lasting for four weeks the difficulty of swallowing gradually disappeared, and the quantity of milk swallowed rose to 210 grammes per diem. The most important results obtained were the following:—1. The quantity of urine excreted daily amounted to 185 c.c. It was of very dark colour, possessed a strong acid reaction, and frequently deposited a considerable quantity of urates. 2. The amount of urea excreted daily, on an average of twelve days, was 8·9 grammes = 4·1 N. The amount of N. ingested with the milk was 0·29 gramme; the excess of N. excreted, therefore, amounted to 3·8 grammes. This quantity of nitrogen is contained in about 25 grammes of dry albumen, and the patient must thus have used up that weight of the dry albumen of her own body. The chief tissue furnishing this would of course be the muscles, and if that amount of dry albumen be calculated as coming from fresh muscle, 112 grms. of the latter would be used up. 3. The excretion of water is not covered by the water of the metamorphosed tissue. The organism, therefore, is dryer or poorer in water during fasting. 4. With increased supply of food the excretion of water through the urine rose, whilst the excretion of urea remained almost unchanged. 5. The metamorphosis of the albuminates during fasting, so far as they are represented by the excretory products of the urine, bears the proportion to the normal metamorphosis of 1 : 4 or 1 : 5.

CATARRHAL VERSUS EPIDEMIC DISEASE IN GLASGOW.

DR. GAIRDNER, in his annual report of the health of the city of Glasgow for the year 1870, reverts to his views, expressed in his report for 1869, of the significance of a high death-rate in large cities from diseases of the respiratory class, and of the preventability to a certain extent of these diseases. He thinks that it is not mere exposure to winds that determines the occurrence of these diseases, but the presence in the air of certain manufacturing vapours. Aberdeen, he urges, is much more exposed than Glasgow to easterly and north-easterly winds; yet in March and April, 1869, when there was a striking mortality in Glasgow from diseases of the respiratory class, Aberdeen almost escaped. Bronchitis in the principal Scotch towns in 1870 caused nearly 14 per cent. of the deaths. In Glasgow it caused 16 per cent. of the deaths; in Edinburgh less than 11 per cent.; and in Perth about 9 per cent. Moreover, the mortality from these diseases is very unequally distributed among the different parts of the city. Though Dr. Gairdner is not able to illustrate this difference with so much detail as he had hoped to command, he shows that in the Southern district in 1870 the mortality from acute diseases of the lungs was nearly 24 per cent. of the deaths from all causes, in the Northern district 23 per cent., in the Central and Eastern districts somewhat more than 22 per cent., while in the Western district the proportion was but little greater than 16 per cent. It is not proved yet that all these differences may not be explained by differences in the conditions of life and the means of resisting climatic influences. But

Dr. Gairdner does great service in insisting on the huge importance of this class of diseases, and in suggesting that the causes of them may be in part discovered and checked. Diseases of the respiratory organs, taken in the aggregate, caused considerably more than a third of the whole mortality. Our readers know how severely relapsing fever affected Glasgow; 720 cases of fever, almost exclusively typhus, were reported in January; only 239 in May. In August fever cases began to increase; 365 were reported, almost wholly relapsing; in September 562; October 957; November 1408; December 1558. For the whole year 7564 cases were reported to the Sanitary Office. This sickness exceeded all the provisions made for epidemic disease. Hospital accommodation was so inadequate that attendance at home became the rule. In many cases of large tenements of overcrowded houses not a family escaped, and in some scarcely an individual was unaffected and able to seek relief for the rest. As usual, sanitary authority was divided between the Parochial Boards, on the one hand, and the Local Board on the other. The parochial medical officers were called upon to do an amount and kind of duty altogether beyond that for which they were paid. Dr. Gairdner properly suggests that the expense of the treatment of epidemic disease in families should not fall upon parish rates, but on the general burgh taxation under the local authority. Glasgow should profit by this experience of a comparatively innocent epidemic, and prepare for more serious ones. There is a very striking agreement between the remarks of Dr. Gairdner on the evil of bad and defective house accommodation as the *fons et origo mali* in cities like Glasgow and those of Lord Derby in Liverpool last week, albeit we think that in both statements drink might have been credited with a little more of the blame of bad houses. There were only 18 fatal cases of small-pox in 1870 in Glasgow.

LORD DERBY ON WORKMEN'S DWELLINGS.

IT is a most encouraging fact that Lord Derby has brought his great common sense to bear upon the question of improved dwellings for the working men of Liverpool. Would that other statesmen would also recognise the great importance of the question, for indeed it has a closer bearing on the happiness and prosperity of the people than all the social and political theories which are just now so abundant. How can the people of Liverpool be happy whilst 5000 lives are sacrificed annually amongst them? What will the ballot do to relieve their distress? Lord Derby drew an admirable picture of the sanitary advantages and disadvantages of Liverpool, and he summed up by saying that the causes of the excessive disease and high mortality were few and simple,—overcrowding and dirt, drunkenness and immorality, and among a certain class an insufficiency of wholesome food, the foundation being insufficient house-accommodation. If a man has to live in a hole, said his lordship, "where cleanliness and decency are impossible, you must not wonder if he tries to drown—I will not call it his misery—but his discomfort, in drink. There is action and reaction in this matter. Crowded lodgings and poisoned air produce the craving for stimulants, and drunken habits keep the family from ever getting a chance of moving into a more respectable home. I hear many people say, 'Oh, education will set all that right.' Now I am as warm a friend to education as anyone, but I am not quite so sanguine. If a man is placed in a position where moderately pure air is unattainable, and self-respect almost impossible, it is not being able to read and write that will keep him out of the gin-shop. But I believe that if it were possible that every man, woman, and child in Liverpool should have a clean, wholesome, and decent lodging, you would have struck a heavier blow at intemperance than could be struck by all the School Boards and all the teetotal gatherings in England put together."

These admirable words deserve to be written up in the public streets. They recognise the great fact that physical well-being stands first in the order of improvement. People must be made cleanly before they can become wise, or sober, or healthy—nay, even before they can become industrious. It is impossible to educate a filthy and a starving people, and the first necessity of a moral life is a comfortable home.

TESTIMONIAL TO DR. KEITH.

THE remarkable success attained by Dr. Keith in ovariotomy, and his general merits as a practitioner, received a graceful recognition on Thursday, the 1st inst., when a Committee—including Dr. Christison and others of the leading physicians and surgeons of Edinburgh—waited on Mrs. Keith, and, in the name of seventy-nine subscribers, presented her with a portrait of her husband and a service of silver plate. Dr. Christison, who made the presentation, after dwelling on Dr. Keith's high qualifications as a professional man, and on his upright character as a citizen, referred particularly to his skill in treating "one of the most terrible diseases that may affect the life of woman," and in establishing ovariotomy as one of the legitimate operations in surgery. Dr. Christison quoted the change of opinion on the part of Mr. Syme ("one of the wisest of his friends") as to the operation. A lady whose case was under consideration by Dr. Christison and Mr. Syme was put under Dr. Keith's care, at the instance of the former, Mr. Syme remarking: "You know that hitherto I have regarded this operation like murder; but I consider now that it has been brought by Dr. Keith within the range of legitimate surgery." Dr. Keith replied in excellent taste to "him whom they regarded as the father of the profession"; and observed that, because his success in ovariotomy had been remarkable, it was not to be supposed that too much had been made of its dangers heretofore. "Now is the time, however," concluded Dr. Keith, "to seek carefully for those perils which are still as much hidden as formerly." The deputation then withdrew.

THE INGHAM INFIRMARY, SOUTH SHIELDS.

THE foundation-stone of this infirmary was laid at South Shields on Tuesday, the 30th ult., by Alderman John Williamson. The infirmary is to be built on the most recent and approved principles, and it is to be commemorative of the character and services of Mr. Ingham, Q.C., who was the first representative of the town in Parliament, and who continued almost uninterruptedly to represent it until his retirement at the last election. The name of Ingham is a household word in this part of England, and is held in the highest regard. Mr. Ingham has lived in such good-will with men as not to have an enemy, and to have acted the part of friend to all with whom he came in contact, whether rich or poor. No building could be so fitly associated with his name as an infirmary, where sickness and poverty will have all the help that sympathy and skill can render. The association is the more fit as Mr. Ingham is the son of the late eminent surgeon of Newcastle. Both Alderman Williamson and Mr. Ingham made very tasteful allusion to the assistance received by the executive committee in prosecuting this great enterprise from the members of the medical profession, and to the cordial support of the inhabitants. Such a building has long been a desideratum in this manufacturing and seaport town. Life will sometimes be saved by it. Bleeding men, or men under the shock of an accident, will no longer have to undergo the

perils of a journey to Newcastle; and, from what we know of Shields surgeons, we anticipate a worthy and creditable competition with their brethren higher up the river.

THE SHARPEY MEMORIAL.

THE sub-committee of the Sharpey Memorial announce that they have received very nearly £1900; of this £1600 will be disposable as a first instalment of the Endowment Fund for establishing the "Sharpey Physiological Scholarship" in University College. The conditions of election to, and the tenure of, that scholarship, proposed by the sub-committee, are now under the consideration of the Council of the College. It is hoped that from time to time additions may be made to the Endowment Fund. Besides providing for the scholarship, the sub-committee have secured the services of Mr. J. P. Knight, R.A., to paint a half-length portrait, already begun, of Dr. Sharpey, for the Sharpey Library in the College. A bust of the Doctor, moreover, excellent in likeness and execution, has been modelled by Mr. Thorneycroft, jun., and it is proposed to have this executed in marble for presentation to the College, and also to have reduced copies of it for those who wish to possess one. By supplying these copies at the rate of one guinea each, the expenses will be met without trenching on the Memorial Fund. The Honorary Secretaries to the Fund, Mr. Marshall and Dr. Reynolds, will be glad to receive the names of subscribers for the reduced bust.

ST. MARY'S HOSPITAL MEDICAL SCHOOL.

THE Governors of St. Mary's Hospital have lately very liberally and properly agreed to devote to the improvement of the medical school the proportion of students' fees hitherto paid to the hospital. This will amount to about £200 per annum, and amongst other important improvements which the School Committee will be able to carry out with the aid of this sum, will be the appointment of a medical tutor for the purpose of assisting students in the wards and in the practical part of their work. The salary of this new officer will be £100 a year, and the appointment will be made as soon as the committee are able to find a satisfactory candidate. The medical tutor will also act as curator, and have the help of an assistant curator.

The following notice of motion was presented at the last weekly board by Colonel Crewe:—"To call the attention of the board (on Friday, the 16th inst.), to the present system of election of medical officers as laid down in laws, with a view to an alteration of such laws." The alterations alluded to have reference to the system of canvassing on the part of the candidates.

SMALL-POX AND CIRCUMLOCUTION.

WE are happy to hear that the guardians of the South Shields Union object to pay expenses incurred "in consequence of seamen suffering from small-pox being sent from ships arriving in the Tyne to Jarrow Slake, situate in the port of South Shields, within the South Shields Union." The Poor-law Board, to whom the matter has been referred, think that the "sewer authority" should be attacked, and the chairman of the guardians thinks that the "sewer authority" is the corporation. Meanwhile, wrangling and recrimination proceed, nothing is done, and small-pox continues to be imported into Shields and other places on the Tyne. We have lately reminded our readers that the ports of the kingdom have suffered chiefly in this epidemic, and that this fact alone should induce the Medical Officer of the Privy Council to pay special attention to the sanitary condition of waterside towns, and to recommend to the proper authorities (when he has discovered them) some definite and simple plan of hospital accommodation. The powers of the Privy Council in these matters may be limited, but an energetic representative sent from head-quarters would, in sketching out a practical plan for immediate adoption, assist to put an end to these petty and ridiculous squabbles, that avail nothing except to show once and again the intense absurdities consequent upon what is popularly called local self-government.

INDIAN QUININE.

WE learn from the *Pharmaceutical Journal*, which in its turn quotes from the *Calcutta Observer* and *Calcutta Englishman*, that a quantity of the new quinine, which the Indian Government was on the point of distributing to the hospitals, was found to be of a green colour, and to contain 20 per cent. of carbonate of copper. This occurrence is accounted for by the extraction of the quinine having been confided to the charge of an intelligent gardener, who, as the *Calcutta Observer* says, displayed "considerable skill in the dissolving of the stewpans." It appears, also, that the Indian authorities propose to dispense with the trouble of effecting the separation of the different alkaloids of chinchona bark, and to issue a mixed alkaloid containing all of them in their natural proportions.

THE METROPOLIS WATER BILL.

THE amended Bill which Mr. Bruce has been frightened by the hostility of the Companies into substituting for his original measure has passed its second reading, and has now been handed over to a Select Committee. The substantial difference between the two Bills lies in this, that the power of making regulations as to the supply, fittings, &c., which in Bill No. 1 was vested in the metropolitan authority, is put by Bill No. 2 into the hands of the Companies; and also in the fact that the powers of purchase given by Bill No. 1 to the metropolitan authority have now been altogether left out. The Bill with which the Select Committee have now to deal is, therefore, one for the simple objects of providing a constant supply and for the better securing the purity of the supply—both highly essential ends to be obtained. We must wait, we suppose, until London is fitted with an effective municipal government before it can be hoped that the water-supply of the metropolis will cease to be a great trading monopoly.

WEST OF ENGLAND SANATORIUM.

THE foundation-stone of this institution was laid on Tuesday, the 30th ult., at Weston-super-Mare, by the Earl of Carnarvon. The ceremony was an imposing one, in all respects worthy of a hospital which bids fair to do for the poor of the West of England what similar institutions have so well fulfilled both South and North. Though in the first instance its thirty-six beds are intended for West of England convalescents, they are also (when vacant) at the service of all who bring a certificate from a medical man that the case is a fit one. Lodging, attendance, and medical care are given without charge, the patient being only required to pay for his maintenance.

POOR-LAW MEDICAL RELIEF.

NOTHING could be more satisfactory than the discussion on this question at the monthly meeting of the Central Chamber of Agriculture. The advocates of an amended system of Poor-law relief could have had no better spokesman than Dr. Rogers, who in a clear, concise, and connected statement brought before the Chamber the statistics previously quoted in THE LANCET. So completely did Dr. Rogers

carry conviction to the minds of his audience that a vote of thanks to him was proposed and carried by acclamation. There was also proposed and carried a resolution in condemnation of the present system of medical relief, and in approval of a scheme of reform on the Irish system. It was urged by Mr. Read, M.P. for Norfolk, that a copy of this resolution should be forwarded to every local chamber, and that its members should be invited to discuss the question without delay. It was further agreed that a copy should also be transmitted to Mr. Stansfeld.

THE BRITISH MEDICAL ASSOCIATION.

WE received a few weeks back from an anonymous correspondent a document relating to an inquiry into the financial position of the British Medical Association, with an erased heading of "Confidential—for the use of the Committee of Council only." Regarding this very surprising paper as private, we declined to make any use of it; but a contemporary proved to be less scrupulous, and on May 27th devoted a leading article to the subject, wandering however far afield, and lamenting, not the patent mismanagement of the Association, but that it was not a purely provincial Association. This has provoked a reply in the organ of the Association, and a long letter from Dr. A. P. Stewart, who is well known to be a leading spirit of the Association. The truth or otherwise of the allegations contained in the document to which we have alluded will doubtless receive, as they unquestionably demand, full inquiry by the Association.

MEDICAL RELIEF IN BIRMINGHAM.

THE Guardians of Birmingham have at length resolved to adopt the dispensary system. At their last meeting a report was brought up recommending the establishment of the dispensary at the parish offices in Paradise-street, which shall be opened on September 30th next. There is to be a dispenser at a salary of £90 a year, and two of the district medical officers are to visit daily at fixed hours for the purpose of seeing the patients who are able to attend. A series of regulations have been drawn up by Mr. Clay, a medical member of the board of guardians, who has long taken great interest in the subject, and it is believed that they are superior to those which are in force in London. We shall watch the experiment in Birmingham with great interest, in the hope that its success will encourage the guardians of all our large towns to adopt it, without the necessity of a preliminary fight like that which has occurred in Birmingham.

NEW YORK HOSPITALS.

RECENT advices from New York state that the Marine hospitals of that city are likely to be abolished, and that it is proposed to receive seamen, in common with other classes, in the general hospitals of New York and Brooklyn. The particulars that hav ereached us appear to indicate that this proposition has reference to the seamen of the merchant service exclusively, and there can be little doubt that, as far as Staten Island Hospital is concerned, the authorities, in this recommendation, are exercising a wise discretion. We took occasion to inspect the hospitals of New York some two years ago, receiving very great courtesy from all officials, and at that time recorded a very decided opinion that, on sanitary grounds alone, the establishment for sick seamen in Staten Island should be either closed or rebuilt. It is, indeed, almost the only institution that does not redound to the credit of our Transatlantic brethren in the very important items of sanitary arrangements and good organisation.

SALARIES OF POOR-LAW MEDICAL OFFICERS.

WE are indebted to Mr. Muntz for drawing the attention of the House to the low figure at which the salaries of some medical officers stand. He denounced the payment of £5 or £10 a year as a sham. Mr. Sclater Booth said that these gentlemen found it worth while to undertake these duties at the price, but he did not inform the House whether the poor were really attended to as their wants required. Mr. Read agreed that the medical officers of unions were very badly paid. It is to be hoped that the new President of the Poor-law Board will accept these observations as an indication of the necessity of action. We have some reason for believing that the question of medical relief is already engaging his attention, and that the extension of the dispensary system will be proposed to Parliament as soon as the arrangements are complete.

MEDICAL AID FOR BUENOS AYRES.

WE have received communications on this subject; and a correspondent has been good enough to forward us a letter from the Argentine Minister, from which we learn that the Legation has received no instructions from the Argentine Government respecting the sending out of medical men from this country to Buenos Ayres, as a sufficient number had already gone from Rio Janeiro; and, independently of this, the epidemic was happily declining, according to the latest news.

ACCORDING to the Report just published, there were 2634 invalid soldiers sent home from India during 1869, being in the ratio of 47·05 per 1000 of mean strength; and of these Bengal furnished 1798, Madras 573, and Bombay 263. The extent of invaliding from Bengal was greater than in 1868, and considerably above the average of the last nine years; from Madras, though lower than in the preceding year, it was very high and above the average; and from Bombay it was under the average, and also under the proportion in the preceding year. Diseases of the digestive system, chiefly hepatitis, dysentery, and diarrhœa, were the most frequent causes of invaliding in all the presidencies.

THE registrar of Dunbar, in Haddingtonshire, N.B., informs the Scotch Registrar-General that the census returns of his district will show that in single apartments, of little more than twelve feet square, twelve and fourteen persons of both sexes herd together. The registrar thinks this will be regarded as a "startling fact," but he forgets that so much that is truly shocking in our social arrangements has been already revealed that the public have by this time come to look upon such revelations quite calmly.

A DEPUTATION from the Council of the Poor-law Medical Officers' Association, introduced by Mr. W. H. Smith, and other members of Parliament, waited by appointment on Mr. Stansfeld, at Gwydyr House, on Thursday last, at 3 P.M., for the purpose of drawing his attention to the modification of the vaccination arrangements now being forced on the guardians generally by the Medical Department of the Privy Council.

Two scholarships, of the yearly value of £25 each, tenable for three years, are offered to women in need of such assistance to pursue the study of medicine. They will be awarded by competitive examination next October, in Edinburgh, and all necessary information regarding them may be obtained from Mrs. Garrett-Anderson, M.D., 20, Upper Berkeley-street, W.

In answer to an inquiry by Dr. Lush, M.P., Mr. Stansfeld stated that the time had hardly arrived for the final settlement of the question of dispensaries for the metropolis. He doubted very much if he should be able to introduce a Bill on the subject this session. We shall be quite satisfied if he will do so in the ensuing one.

Sir Charles Adderley's promised Bill for amending and consolidating the laws relating to Public Health and Local Government, which he was to have introduced on Tuesday next, has been postponed till July 4th. Under these circumstances its chance of passing this session is small indeed.

The subscription-list for the testimonial to Mr. Cordy Burrows, of Brighton, will close in a few days. Those of his numerous friends and admirers who may not yet have subscribed should therefore make their contributions to this most commendable object *quam primum*.

Dr. Guy's third lecture, "On War in its Sanitary Aspects, with special reference to the period from 1793 to 1815," will be delivered on Tuesday, the 13th, and not Wednesday, the 14th inst., as previously stated.

H.R.H. the Princess of Wales has contributed twenty-five guineas to the National Hospital for Consumption, Ventnor, Isle of Wight.

The Emperor Napoleon has so far recovered from his attack of rheumatic gout as to be able to walk about the grounds at Chislehurst without difficulty.

Dr. Lyon Playfair obtained leave on Wednesday to bring in a Bill to amend the law relating to the Registration of Births in England.

ST. THOMAS'S HOSPITAL.

By the kindness of Mr. Currey, we have once more had an opportunity of inspecting the buildings of the new St. Thomas's Hospital, in their state of approaching preparedness to receive her Majesty upon the opening day. All scaffoldings and other impediments have been removed from the corridor, both above and below stairs; thus showing its great length and fine proportions unbroken from end to end. The Parian cement that was applied to the walls of the wards has not produced so good an appearance as was hoped for; and, although its surface leaves little to be desired, its colour is varied and patchy. We are informed that this defect will be concealed by painting the walls in distemper. Two wards will be quite ready on the day of her Majesty's visit, and will be completely fitted with their beds and other appliances; but no patients will be received for about a month after the opening; from which time they will be brought in by degrees, as the arrangements for their reception can be made. The school buildings are in a state of much forwardness; and all the machinery that once intervened between them and the hospital has been cleared away, leaving a space which is being levelled, drained, and provided with pathways. The chapel still looks cheerless, in spite of the warm tone of its walls and a certain amount of gilding in its ornament; and it much needs colour decoration, and stained windows. The waiting and examination rooms for out-patients, and the dispensary, may be said to be complete in all but some small matters of fittings; and the accommodation thus provided is amply sufficient for all probable requirements.

Her Majesty will enter the hospital between the administration block and the first block of the hospital proper; so as to be conducted at once into the ground floor corridor. The Royal procession will pass along the corridor nearly to its centre, ascend to the first floor, pass into two wards which the Queen will name, and then down another staircase to the principal entrance, by which her Majesty will depart.

YELLOW FEVER IN BUENOS AYRES.

The latest news from Buenos Ayres states that the reduction in the mortality from yellow fever in the city is considerable. Out of a total population of 180,000, not more than 25,000, it is estimated, remained in the city. The municipal authorities, paralysed in the first instance by the rapid extension and excessive virulence of the scourge, as well as by the great exodus which took place, and the impracticability of organising systematic operations for the restraint of the epidemic in the height of the panic, are now bestirring themselves very actively to remedy temporarily some of the most glaring nuisances in and about the city. An attempt to close the great meat-curing and slaughtering establishments when the epidemic had fully declared itself failed, from the impossibility of getting together a quorum of the provincial authority at the time. These establishments, in which about one thousand head of cattle are killed daily, are conducted, it would appear, so far as the slaughtering of the animals is concerned and cleanliness, with the same utter disregard for the future which has characterised the sanitary administration of the city. Each slaughtering-place has become a spot of abomination, and it is believed that the fouling of the atmosphere in the vicinity from the filth-sodden soil and putrid refuse has contributed not a little to the aggravation of the epidemic in the adjoining localities. It is, perhaps, fortunate that the movement to close these establishments failed, as no provision would appear to have been made, or even to have been contemplated, in the event of closure, for the maintenance of the persons working in them. One cause of want of cleanliness in these establishments, and in the city generally, was no doubt the very insufficient water-supply.

The following account of the state of the City at Easter is from a local journal:—"On Easter Monday, April 10th, the plague reached its climax. Five hundred and forty 'bolelos' for interment were issued between sunrise and sunset; the gravediggers toiled on by the light of lanterns, and more than 1000 bodies were interred on that day. Here it is worth relating that of 360 gravediggers employed, not one died of fever. No pen can describe the aspect of Buenos Ayres on this mournful day. Hearses and coffins passed you every moment. The shops were closed, and bore the impressive notice, 'Closed till the plague is over.' Even the tower clock of the Cabildo had run down, as if there was no one to wind it up. Notices on the street corners called for policemen, the force having dwindled down from death and desertion. On entering the *Standard* Office we found but three men; the rest were sick or missing. We began as usual our labours, as though our five-and-twenty hands were present; but as the day wore on the solitude grew oppressive, and all efforts to get workmen were in vain. At 12 o'clock one of our three men was taken sick; an hour later the foreman had to go, as his family were down. We were left with two men, and had just sufficient strength to get out the paper on the 11th, taking leave of our readers for a fortnight." Several other papers suspended publication for the same reasons. Out of 130 doctors, only eighteen were surviving on the 30th of April. "During holy week, gloom and desolation reigned throughout the city. The streets were silent and deserted, except where a hearse appeared, followed by a solitary coach. From nearly every door a piece of crape hung. The windows of the houses were open, sometimes also the doors, but there was no sign of life within. The sun shone brightly, but the air was heavy with the odour of death. No carts were in the streets, no carriages on the stands, no porters or labourers at work, no sound of children's voices, not even the dog's bark to break the awful

silence. In the Calle Florida, the most fashionable of our streets, you might have fired grapeshot at noonday without hitting anyone. In the south end you might have walked through many of the streets without meeting a living being. The houses were all open, the furniture untouched, for even that was supposed to be infected. In a word, the city was like a ship abandoned at sea."

SOCIAL SCIENCE ASSOCIATION.

ON THE NECESSITY OF IMMEDIATE LEGISLATION FOR THE SUPPRESSION OF SMALL-POX.

ON Monday evening Dr. LANKESTER read a paper on the suppression of small-pox. He observed that it was very evident that the existing laws were quite inadequate to meet the requirements of the case, and yet the apathy was remarkable. 5000 persons had already perished in the metropolis, and it was probable that another 3000 would be lost before the epidemic ceases. Besides the loss of life, he estimated the money loss to the country at five millions sterling. He complained that people were allowed to spread the contagion of small-pox and to afford it pabulum by the neglect of vaccination. Firebrands were let loose on society, and yet no one stirred from the fireside to put a stop to them. Of all diseases small-pox was the most dreadful and yet the most thoroughly preventable. It could not exist in a vaccinated and revaccinated community. Therefore, let everyone be vaccinated. The law did not vaccinate everybody. The committee which had just reported were going to do a little tinkering, but it would not vaccinate everyone, as it dealt with the parent, and not with the child. Then there must be inspection and revaccination in infected districts; but it was no use doing it in one district only; the practice must be universal. Vaccination was for the community a question of life and death, and ought not to be trusted to boards of guardians and vestries. But, in the next place, there must be prompt and complete isolation. If you "collar" the first case and isolate it, you would not even require vaccination. But there must be no concealment. A tailor in Paddington destroyed two coats because his workman had small-pox in his family; but how unjust we were to that man if others were permitted to continue working and to spread contagion. He complained that medical men sometimes connived at the concealment, and said that they ought to be punished for not revealing every case. If 5000 cows, pigs, or horses had died of plague there would have been legislation long ago, but they were doing nothing to stop the great plague of small-pox.

Dr. STEWART complained of the neglect on the part of the Government to put the Diseases Prevention Act in force, and said no doubt this would have been done in the case of a cattle plague. He also complained that no proper ambulances had been provided for the removal of patients, and that disease had doubtless been propagated in this way.

Mr. HASTINGS spoke as a layman on the question of vaccination, the efficacy of which no reasonable student of history could doubt. He complained of the law, the principle of which ought to be that no person should be permitted to do evil to another, whatever he might choose to bear himself. The parent who neglected to have his child vaccinated did that child a wrong, and the State had a full right to act on the child's behalf—just as in the case of the neglect of education, compulsion became a State duty. He was asked whether he would take a child by the neck and send him to be vaccinated. As in the case of an ignorant child, who is certain to become a criminal, so in the case of neglect of vaccination he would take the child by any part of its person to render him so great a service.

Dr. FARR (the chairman) said that all the world was interested in vaccination. The fatality in Holland was due to the neglect of it, and Great Grimsby had suffered in consequence.

The meeting was addressed by Drs. Rendle, Foster, Stallard, Bain, Pearce, &c. The subject was referred to the Health Committee for further consideration.

THE SMALL-POX EPIDEMIC.

ALTHOUGH there is a slight diminution in the number of deaths from small-pox both in London and in the seventeen large towns which make a weekly return, there is no substantial diminution of the epidemic. The number of fresh cases is still very large. In St. Pancras there were 101 last week, as compared with 57 the week before, and in Islington, Hackney, Shoreditch, St. Saviour's, and particularly in Wandsworth and Clapham, the disease is fearfully prevalent. Nor is the type ameliorated. At Homerton there has been a considerable proportion of hæmorrhagic cases. The Registrar-General reports as follows:—

"The fatal cases of small-pox in London, which in the two previous weeks had been 267 and 257, further declined last week to 229. In seven permanent and temporary hospitals for this disease 112 deaths were recorded last week, of which 71 and 24 occurred respectively in the institutions at Hampstead and Stockwell. After distributing these deaths among the districts from which the deceased had been admitted, it appears that 28 deaths belonged to the West group of districts, 82 to the North, 20 to the Central, 24 to the East, and 75 to the South. The fatal cases showed a large increase in the North districts, while there was a marked decline both in the East and South of London. No less than 43 of the 82 deaths from small-pox in the North districts belonged to St. Pancras, showing an annual death-rate of 10 per 1000 of the persons living. In St. James's, Bermondsey, and in Battersea the fatality was also very great; in the latter sub-district, of 29 deaths 16 resulted from small-pox, or equal to an annual rate of 15 per 1000 of the population.

"The failure of vaccination in arresting small-pox is due chiefly to defective administration. Dr. Bain, writing from Poplar, speaks of the great advantages that have there been derived, in spite of obstacles of various kinds, from the appointment of a vaccination officer to look up all unvaccinated cases, and to promote vaccination. In the Poplar district the annual rate of mortality from small-pox in the ten weeks ending the 27th ult., was only 1·3, while in the whole of London it averaged 3·9 per 1000 persons living."

HOSPITAL ACCOMMODATION.

During the past week there has been sufficient, though by no means ample, accommodation for the fresh cases of small-pox. The admissions have been more numerous in proportion to the number of fresh cases. The number of children admitted has greatly increased. There has been some delay in bringing up the *Rhin* in consequence of some objections being made to the mooring of her beside the *Dreadnought*. But the difficulty has been overcome, and the *Dreadnought* Committee are now actively preparing for her immediate occupation.

SMALL-POX IN SOUTHAMPTON.

The Registrar-General reports that "in Southampton 16 deaths from small-pox were registered last week, against 17 and 16 in the two previous weeks; the annual death-rate from this disease alone last week was equal to 17 per 1000 persons living. Dr. MacCormack, medical officer of health to the town, writes that the 1000 cases of the disease recently reported to the Sanitary Committee were not then co-existent, but were the cases that had occurred between January 1st and May 1st, since which he adds that 495 additional cases have occurred."

CHOLERA IN RUSSIA.

OFFICIAL reports made to the Medical Department of the Minister for the Interior give the following additional particulars respecting the progress of epidemic cholera in Russia. From March 12th to April 12th isolated cases of the disease occurred in the environs of St. Petersburg, at Cronstadt, in the districts of Peterhof, of Novaia-Ladoga, and of Tsarkoé-Selo. The entire number of cases recorded in these localities, during the period named, was 42, of which 17 died. In the city of Moscow 45 cases of the epi-

demic had occurred from the time of its first appearance there to April the 13th; and from April the 13th to the 20th there were 13 cases and eight deaths. In the government of Moscow, to March the 22nd, 10 cases had been recorded, distributed in the towns of Kolomna, Serpoukhow, and in the districts of Serpoukhow and of Dinitrow. The reports from other localities are as follows:—District of the Kretsy (government of Novogorod), March 24th to April 13th, 7 cases and 3 deaths. The seven persons attacked had arrived in the district, by railway (time of arrival not stated), from St. Petersburg. At the Oukoulovka station of the Nicolas railway (same district) a fatal case occurred. District of Riazan, March 27th to April 8th, 10 cases and 3 deaths. The first person attacked in this district (in the village of Ivaschkovo), was a soldier, who had come there from St. Petersburg, apparently in good health, three days previous to his seizure. Wierzbolow, April 13th to 17th, 17 cases, 2 deaths. Smolensk, beginning of April, 5 cases, 4 deaths. Vilna, April 5th, 3 cases and 2 deaths. District of Podolsk (government of Moscow): Fortress of Dunabourg, March 31st to April 12th, 9 cases, 3 deaths; village of Berejki, beginning of April, 5 cases, 2 deaths.

The following returns from St. Petersburg complete the returns previously given:—

	New Cases.	Recoveries.	Deaths.
April 17th ...	22 ...	61 ...	6
18th ...	12 ...	69 ...	5
19th ...	16 ...	50 ...	6
20th ...	12 ...	39 ...	1
21st ...	15 ...	34 ...	3
22nd ...	15 ...	44 ...	5
23rd ...	11 ...	37 ...	4
24th ...	11 ...	26 ...	2
25th ...	6 ...	25 ...	5
26th ...	10 ...	23 ...	4
27th ...	7 ...	25 ...	3
28th ...	6 ...	29 ...	5
29th ...	4 ...	9 ...	0
30th ...	6 ...	32 ...	5
May 1st ...	1 ...	12 ...	0

Correspondence.

"Audi alteram partem."

THE BRITISH MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—I would esteem it a favour if you would insert, in the next number of THE LANCET, the following letter. It is one which the writers believe to be an unavoidable sequel to the correspondence with Dr. Paget published in your journal on May 27th.

I am, Sir, your obedient servant,

Oxford, June 5th, 1871. HENRY W. ACLAND.

(COPY.) May 24th, 1871.

SIR,—It is with regret that we find ourselves compelled, under existing circumstances, to withdraw from the British Medical Association.

We are, Sir, your obedient servants,

G. E. PAGET. HENRY W. ACLAND.
WM. STOKES. D. EMBLETON.
H. W. RUMSEY.

To the President of the British Medical Association.

HOSPITAL ELECTIONS.

To the Editor of THE LANCET.

SIR,—I trust you will allow me a few words in reply to some observations in your leading article of last week on "Hospital Elections," as from the writer's way of stating the case in reference to the election at St. Mary's Hospital, your readers might infer (1) that some of the candidates had acted *contra bonos mores* in becoming candidates, and (2) that an active canvass was still being carried on. The governing body of St. Mary's Hospital advertised a vacancy in the office of physician-accoucheur in the medical journals of April 29th, and invited gentlemen to apply. In correspondence with the chairman of the Medical Committee no mention was made to the effect that the Medical Committee intended giving their unanimous support to Dr. Meadows. Three weeks after I had applied, Dr. Meadows stated that he had not yet made up his mind whether he should go in for the post.

Disliking a personal canvass, I had called on no one, save the members of the Medical Committee, without being invited to do so. Though, through the influence of others, my supporters were very numerous, on May 20th I retired from the contest in favour of Dr. Meadows, on the ground that he was my colleague at the Hospital for Women, and senior to me in the profession. The other candidates having also withdrawn, he now stands alone a candidate for the post he is so well qualified to fill.

I remain, Sir, yours very faithfully,

HEYWOOD SMITH.

Portugal-street, Grosvenor-square, June 7th, 1871.

To the Editor of THE LANCET.

SIR,—In your leader last week on the above subject, in reference to St. Mary's Hospital, you are, I think, a little severe on the retiring candidates. It was not until the very last moment for sending in the application that Dr. Meadows decided upon nominating himself; when myself and another had already been actively at work for a fortnight. As soon as the Medical Committee met, and decided to support Dr. Meadows, we at once retired from the contest, and empowered Dr. Meadows to send round a circular to the Governors intimating the fact, which was done. The system is altogether bad. If the election rests with the body of Governors generally, why allow the Medical Committee to settle the question? if with the latter, why compel one to go through the farce of appealing to the former and thus putting oneself to no small expense and much unnecessary trouble.

Your obedient servant,

May, 1871. ARTHUR W. EDIS.

THE CONSTANT CURRENT IN THERAPEUTICS.

To the Editor of THE LANCET.

SIR,—I think Dr. Gull is not justified in speaking of my letter as showing "anger," though undoubtedly it expressed what I felt—deep regret at a very uncalled-for attack upon the freedom of medical inquiry. My complaint was that Dr. Gull, whatever he intended to say, did in fact convey the impression to the Clinical Society that the constant current was, and had been proved by him twenty years ago to be, a merely empiric remedy with no sufficing evidence, even of an empiric kind, in its favour; that, as regards proof, it stood, in fact, on much the same footing as Perkins's metallic tractors.

Dr. Gull now says he did not mean to impose his incredulity on the Society; but that the subject of pain is a very vague one, and that the cases brought forward by Dr. Buzzard and myself were not sufficiently fully described to assure us of the diagnosis, and of the curative influence of the current.

I confess that I do not understand Dr. Gull. The cases related were three as typical examples of neuralgia as it would be possible to find. It is scarcely necessary to admit that if these cases had been adduced as proofs of the efficacy of a hitherto unknown remedy, they would of course have been very inadequate. But neither Dr. Buzzard nor myself could have imagined that an enlightened body of practitioners like the Clinical Society would at the present day suppose that such was the position of the constant current; the facts concerning its action in neuralgia having for some years been before the profession in German journals and treatises, and in the learned work of Dr. Althaus, and summaries, at least, of these facts having duly appeared in the English year-books &c. of medical science. At the same time it was notorious that there was apathy on this subject in England. Our cases were, therefore, brought forward as illustrations of admitted facts, not as proofs of controverted ones. When Dr. Gull, then, thought fit to challenge our cases, to all appearance on the ground that the constant current had been shown by him,

twenty years ago, to be uncertain and untrustworthy in its action, it became necessary to protest in strong terms. It would not do to let the English profession even momentarily forget that all the really important researches on the medical uses of the battery-current have been made since the time of Dr. Gull's experiments; the fact being that at the date of the latter no proper apparatus for making the *continuous* current really *constant* was in existence. Dr. Gull now suggests that Daniell's battery is a "constant," and reproaches me with forgetting that it was invented as long as thirty years ago. The reproach was needless. I, an old King's College man, was not likely to have forgotten the date of Daniell's invention;* but I fail to see what bearing it has on the present discussion. Daniell's battery was not made fit for *medical* purposes till much less than thirty, or indeed than twenty, years ago. As is well known to students of the subject, Daniell's original cells required considerable modification before they were fitted to deliver a current that should be sufficiently constant; and I believe that the first such battery that was used in this country was built for Dr. Althaus, by Mr. Becker (of Elliot and Sons), about ten years ago. The researches at Guy's Hospital, to which Dr. Gull refers, must therefore have been made either with a Cruikshank's battery, or with an unmodified Daniell's—that is to say, with a battery that is not constant at all, and cannot be in the least relied on to produce those effects which are now understood to be the special therapeutic functions of the constant current.

I must, therefore, respectfully repeat my appeal to the profession, not to allow itself to be prejudiced by statements which are irrelevant to the real question—the amount and kind of influence which an approximatively constant current exerts upon a neuralgic nerve. *It is most undesirable that the use of the remedy should be left in the hands of a few persons.* Every member of the profession who can command the requisite leisure ought to set himself honestly to the study of so much of the laws of electricity, and of the construction of apparatus, as is absolutely necessary for the comprehension of the very elements of medical galvanisation. Having done this he ought not to shrink from the somewhat heavy expense (from £10 to £15) of providing himself with an efficient constant battery (e.g., Stöhrer's Bunsen, Foveaux's Smee, or Becker's Daniell); and if he will then apply the remedy with the necessary care and knowledge, I have no doubt whatever that he will arrive at the conclusion that it is at least one of the most powerful and direct therapeutic agents that we possess. *Until* he has made this kind of trial, he has not the smallest right to hold any independent opinion concerning the value of the current.

I am, Sir, yours faithfully,

June 5th, 1871. FRANCIS E. ANSTIE.

To the Editor of THE LANCET.

SIR,—Will you allow me to ask your readers whether any of them are acquainted with Dr. Hammond's battery for the continuous current? The apparatus is described in his translation of Meyer's Treatise on Medical Electricity. If effective, it would be a good instrument, being simple and inexpensive.

This latter item, the expense, is the only objection to the beautiful and compact battery of Mr. Foveaux (Weiss and Son), and until a cheaper one can be obtained I fear that few neuralgias &c. will yield to the continuous current.

Medical men are introducing a wrong use of the term "constant"; as used in galvanic science it means a *battery* which is always acting equally, and will continue in operation for some time without fresh fluids; and may of course contain any number of elements.

The "continuous" *current* is, I imagine, the right form of speech, distinguishing it from the interrupted current supplied by an induction apparatus. The use of the words "galvanisation" and "faradisation" would get rid of the error.—I am, Sir, yours truly,

CAREY PEARCE COOMBS, M.D. Lond.

Castle Cary, near Bath, May 29th, 1871.

*** It is evident that our correspondent has missed the real point at issue. There is no dispute at all that the use of the interrupted current shall be called "faradisation" and the use of any *battery* current shall be called "galvanisation." The currents from batteries of various kinds are all known as "continuous," and were experimented with years ago. But the apparatus (such as Cruikshank's, and such as Hammond's, Pulvermacher's, and a good many more that could be named) had not the attribute of *constancy*, which, as Dr. Coombs very justly remarks, implies that the battery remains always equally in action (when the elements are immersed in the excitant), and will remain unaltered, without fresh fluid, for several weeks or months. Such are Daniell's batteries *as they have been modified within the last few years.* Such, with slightly less accuracy, is Weiss's modification of Smee. Such again is Stöhrer's Bunsen's constant (10 to 40 elements). Continuous currents which are not derived from constant batteries are of little or no value, and it was these that brought discredit on the method. We fear that a very cheap *constant* apparatus is at present impossible.—ED. L.

* After all, it was not Daniell, but Becquerel, who invented the constant current.

SPECTROSCOPY OF BLOOD-STAINS.

To the Editor of THE LANCET.

SIR,—Touching the employment of spectroscopy in criminal cases, it appears to me that you have rendered good service by directing attention to the present condition of our knowledge on the subject.

Further investigation of the "absorption bands" furnished by different substances, and further improvements in the methods of observation, may possibly render that portion of spectroscopy all that its cultivators claim for it. At present, however, on general grounds, and more particularly bearing in mind recent illustrations which very eminent spectroscopists have afforded of the fallibility of absorption bands, I think we ought to hesitate before according to them a paramount importance in the decision of capital cases in our law courts.

I am, Sir, yours, &c.,

London, June 7th, 1871. J. ALFRED WANKLYN.

PIROGOFF'S OPERATION.

To the Editor of THE LANCET.

SIR,—I beg to forward for publication a brief history of two cases of Pirogoff's operation, and as they occurred in diametrically opposite subjects, I hope their interest may be enhanced.

CASE 1.—H. P——, aged twenty, a robust carter and ploughman, injured his right foot through a large lump of coal falling off a cart upon it. Being unable to walk, he rode home in his cart, a distance of eight miles, and on the following morning sent for me. On my arrival I found the whole foot so immensely swollen that I was utterly unable to discover the amount of injury. The second day after the accident gangrene of the great toe set in. It extended to the three adjacent ones, and they all sloughed off, leaving only the little toe. The cicatrix healed well, and a fortnight after I was again sent for, the messenger telling me he had passed a very bad night through excessive pain in his injured foot, which he described as steaming like a furnace. On my visiting him I found the dorsum of the foot very much swollen, and excessively tender to the touch. Sinuses followed, and the head of the astragalus was laid bare. There being no chance of saving the foot, I decided upon performing Pirogoff's operation, which I did in the usual manner. After dividing the os calcis the cut surface bled so freely that I was obliged to use the actual cautery before I could place it in apposition to the bones of the leg. He made an uninterruptedly good recovery, and was able to plough six months after the accident. He is now, five years after the operation, a carter, and not unfrequently walks twenty miles a day, over all sorts of roads. His leg is barely half an inch shorter than the other, and when he walks only the slightest possible limp is perceptible.

CASE 2.—Mrs. E——, aged forty-eight, admitted into the Shepton Mallet Hospital, under my care, with extensive disease of the tarsus of the right foot, from which she had

suffered for nearly two years. On her admission she was very weak and worn out, through the pain she had endured. After a short time her health improved, so that I was able to take off her foot. I performed a Pirogoff, and she was able to leave the hospital eight weeks after the operation, with the os calcis firmly united to the tibia, a small sinus only existing on the inside of the line of incision. She is now, eight months after the operation, able to walk very well, and with a limb only one inch shorter than the other, her general health being at the same time excellent.

I do not endeavour to urge for one moment upon my professional brethren that in all cases a Pirogoff should be preferred to either a Syme or a rectangular after Teale, but I do believe that if a Pirogoff can be performed, it will yield better results than either of the others. I hold that the very slight shortening there is in cases of Pirogoff is of the utmost moment, and I believe this shortening may be reduced to a minimum. So far as the results of my own cases are concerned, I can only say that they have exceeded my most sanguine expectations. In each the os calcis became firmly united to the tibia, and in each the skin became as thick as the ordinary skin of the heel.

Apologising for thus far troubling you,

I am, Sir, your obedient servant,

SAMUEL CRADDOCK,

June, 1871. Surgeon to the Shepton Mallet Hospital.

IRELAND.

(FROM OUR OWN CORRESPONDENT.)

ROYAL COLLEGE OF SURGEONS.

THE Fellows of this College proceeded on Monday, the 5th inst., to elect a president, vice-president, and council for the ensuing year. Mr. Wharton, surgeon to the Meath Hospital, was elected president; and for the office of vice-president, vacated by Mr. Wharton's promotion, there were three candidates—viz., Messrs. Darby, Kirkpatrick, and Mapother, the last-named gentleman being the only one who has served on the Council, the body from which the selection has been almost invariably made. As a natural result, a lively contest ensued, which terminated in favour of Mr. F. Kirkpatrick, surgeon to the North Dublin Union. For the Council, all the out-going members sought re-election, but were opposed by several candidates who wished to infuse new blood into the composition of that body, and the result showed that they were correct in putting forward their canvass. The following are the names of those who were elected:—President: James H. Wharton. Vice-President: F. Kirkpatrick. Secretary: Wm. Colles. Council: William Hargrave, Robert Adams, William Colles, Hans Irvine, Rawdon Macnamara, G. H. Porter, Hamilton Labatt, Benjamin McDowel, Edward Ledwich, William Jameson, Alexander Carte, George Hatchell, William A. Elliott, Archibald H. Jacob, John Morgan, Ed. Hamilton, Albert Walsh, John Denham, and Robert McDonnell, the last three gentlemen being new members.

UNIVERSITY OF DUBLIN.

The first examination for State Medicine, the new qualification instituted by this College, will take place next Monday, the 12th June, and will include Medical Jurisprudence, Chemistry, Morbid Anatomy, Law, Engineering, Meteorology, and Vital Statistics.

THE IRISH MEDICAL ASSOCIATION.

The annual meeting of the members of this Association was held in Dublin on Monday, the 5th inst. Dr. Darby, the out-going President, presided, and in an able address reviewed the objects of the Association. He stated, among other matters, that through it, instrumentally, the clause of the Act of Parliament which precluded the Poor-law medical officers from securing retiring allowance had been repealed, and he looked forward with hope to the development of some means whereby the widows and children of their less affluent brethren might be permanently provided for. Resolutions were passed, that the principle of requiring the resignation of the medical officer before superannuation is asked for, is unjust, and deters many old and deserving officers from retiring, and that the inadequate amount of remuneration given by the Government to medical men, when called upon to give skilled professional evidence, was unjust and derogatory to the profession. It was also proposed that a Superannuation Fund for the benefit of the Poor-law medical officers be established by means of funds provided by compulsory deductions from their salaries, with or without Government aid, and that a committee be formed to prepare a Bill to carry out this object. The officers for the ensuing year were then elected as follows:—President, Dr. Kennedy; Vice-Presidents, Drs. Darby, Benson, Harvey, Hynes, Macnamara, Martin, and Walsh; Council, Drs. Smith, Pendleton, Chaplin, Chapman, Churchill, Darley, Davys, Faussett, Hasler, Jacob, Labatt, Ledwith, Mapother, Minchin, Morgan, Morrogh, Porter, Seward, and Wharton; Secretary and Treasurer, Dr. E. J. Quinan.

TYPHUS FEVER.

This malignant malady, which seems never absent from large cities, is at present more prevalent than usual in Dublin, and I regret to state that among those who have fallen victims to it, is a member of our profession, Dr. Hewitt, physician to the City of Dublin Hospital, who died on Sunday last, the 4th inst., at the early age of twenty-five; a son of Dr. Ringlands, of this city, a medical student belonging to the Ledwich School of Surgery, has also succumbed to this fatal affection after a few days' illness.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

The twenty-ninth annual meeting of this Society was held on the 5th inst. in the Library of the College of Surgeons. The chair was occupied by Mr. Walsh, ex-President of the College, who contrasted the first meeting of the Society in 1842, with the present influential one. From the report of the Central Committee, it appears that the funds of the Society are increasing, and that the funded capital amounts to £14,000. The number of applicants for relief this year is about the average for some time past—viz, 91. An analysis of these shows that 12 are new applications, 15 are medical men, 72 widows, and the remaining 4 orphans; 9 of these applications were disallowed, and 82 were approved. These 82, added to those already receiving assistance, make up a total of 240 who are directly benefited by grants from this Society. During the meeting an anonymous letter was read by the chairman, offering £1000 in case twenty medical men in Dublin gave £100 each, or forty who would give £50 each. In the discussion which followed this proposal, Dr. Banks and Dr. Tagart each offered £50, in case a subscription list was opened for this purpose. A vote of thanks was then passed to Mr. Walsh for presiding, and for the interest which he had shown in the Society by his second donation of £50; after which the meeting separated.

Dublin, June 6th, 1871.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

THE meeting of the American Medical Association at San Francisco was not only the great medical event of the year, but equally of the quarter of a century of the Association's existence. As Professor Stillé, the president, very aptly remarked, when the Association was organised, in 1847, California was a wilderness and San Francisco was almost unknown. A journey to this *terra incognita* was an undertaking full of adventure, which only the most daring frontiersman was willing to attempt. Now the trip across the continent is but a holiday excursion, which the old and young, rich and poor, daily enjoy. California has become one of the most important states in the Union, and San Francisco a populous city. The Association met in Pacific Hall, May 2nd, and on the roll of the Convention were the names of 200 members in attendance, representing twenty-three different states, two territories, the United States army and navy, and several foreign states. Dr. Stout, on the part of the profession of California, made an address of welcome, and the President delivered the annual address before the Association. His theme was that which forms the staple of our annual discourses—medical education. He strongly recommended a union of schools in their efforts to secure reform. Two prize essays were announced—

viz. (1) "On the Chemical Construction of Bile," by Dr. E. R. Taylor, of Sacramento, California; and (2) "The Direct Method of Artificial Respiration of persons apparently dead from Suffocation by Drowning or from other causes," by Dr. B. Howard, of New York. The sections on Surgery, Medicine, Obstetrics, and Physiology, were organised, and discussed the various papers referred to them. The reports of committees were few in number, and of little importance. Dr. Gibbons presented a valuable paper "On the Medical Botany of California," embracing specimens, with descriptions of 180 indigenous plants. The Association heartily adopted the proposition of Dr. Storer, to aid in the formation of a memorial fund in honour of the late Professor Simpson. A resolution in favour of the establishment of professorships of hygiene in medical schools was adopted, and also one recommending the formation of State Boards of Health. The "apple of discord" was the woman question. This was introduced in the form of a proposed amendment to the constitution of the Association, as follows:—"Nothing in this constitution shall be so construed as to prevent delegates from colleges in which women are taught and graduated in medicine, and hospitals in which medical women-graduates attend, from being received into this Association." After a long and most exciting debate, the resolution was indefinitely postponed. Subsequently the subject was brought up in another form, a resolution being presented "that the American Medical Association acknowledges the right of its members to meet in consultation the graduates and teachers of Women's Medical Colleges, provided the code of ethics of the Association is observed." This resolution also met violent opposition, and was indefinitely postponed. The scientific discussions of the session were very meagre, both in the sections and in the Association. The members were most hospitably entertained by the profession and citizens of San Francisco, and though this, like other annual gatherings of the profession in this country, did little to advance the science of medicine, it did much to promote good feeling and strengthen the ties of professional fellowship.

New York, May, 1871.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

ON the 30th of May, at its annual meeting, the Academy of Sciences of Vienna, with Professor Rokitansky as president, elected Mr. Darwin one of its Honorary Associates. Professor Bamberger has definitely accepted the Chair of Clinical Medicine here, and will begin his lectures in October. His election seems to give general satisfaction.

There is a slight decrease recorded in the number of deaths from typhus and typhoid fevers, and the new cases appear to come only from a limited portion of the city, near the Danube Canal. In the week ending June 3rd, 105 fresh patients with "typhus" were admitted into the various hospitals.

Altogether, during the epidemic, 1255 patients have been treated in the hospitals, of whom 612 have recovered, 221 have died, and the remainder are in the physicians' hands.

Vienna, June 6th, 1871.

Obituary.

DR. JAMES WATSON.

THIS able and accomplished physician was born in Glasgow in 1787; educated at the High School and University at first for the Church, but afterwards for Medicine, and admitted a Fellow of the Faculty of Physicians and Surgeons in 1810. From this date to within the last ten years his professional career was one of steady advancement in the esteem of his fellow-citizens and brother practitioners. At first he acted as surgeon to the Royal Infirmary, but, preferring to devote his time to Medicine, he became, in 1842, one of the physicians to the same institution. He also held the physiciancy to the Fever Hospital in Clyde-street. He was three times elected President of the Faculty of Physicians and Surgeons of his native city, and bore for a long period the affectionate title of "father of the Faculty," in virtue not only of his seniority, but of his truly parental solicitude for the interests of the corporation. A portrait which hangs in the Faculty Hall, and the foundation of a "James Watson Prize," were further marks of the esteem in which his colleagues held him. In 1858, when the General Medical Council of the United Kingdom was instituted, he was chosen to represent in it the Faculty of which he was president. This post he held till failing strength compelled him to resign it, but not before he had contributed much to the deliberations of the Council, and particularly to the improvement of the preliminary education of medical students. In 1860, when his wife died, Dr. Watson retired from the active pursuit of the profession, and found a *perfugium et solatium* in those early classical studies which, never altogether abandoned, renewed their attraction for him in his declining years. He leaves four daughters and one son, Dr. Ebenezer Watson, Professor of Physiology in the Andersonian University. His funeral, which was solemnised on the 3rd inst., was attended by a large number of friends and professional brethren.

THE COLLEGE OF SURGEONS.

AT the meeting of the Council of the College of Surgeons on Thursday last, the report of the Court of Examiners on the recent Fellowship Examination gave rise to some discussion, in which Mr. Erichsen and Mr. Quain expressed a strong opinion as to the unsuitableness of the questions set, and the unfairness of limiting the number of questions to four. Mr. Busk, as chairman of the Court, entered into an explanation; but though no motion on the subject was carried, we believe the feeling of the majority of the Council was in accordance with the view recently expressed in these columns upon the matter.

The several nominations prior to the annual election of the Professors and Lecturers of the College were made; and it was announced that Professor Birkett and Mr. Hulke did not wish to be again put in nomination.

The following motion by Mr. Charles Hawkins—"That all legal opinions taken by the authority of the President or Council be laid before the Council"—was carried, with the significant addendum, "as early as convenient."

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members, having passed the required examinations for the Fellowship on May 25th, 26th, and 27th, were, at a meeting of the Council held on the 8th inst., duly admitted Fellows of the College:—

Ashby, Alfred, L.S.A., Staines, Middlesex.
Bartleet, Hiron, M.B. Lond., Birmingham.
Bloxam, John Astley, L.S.A., St. Bartholomew's Hospital.
Churchill, Frederick, M.B. & C.M. Edin., Great George-street.
Cooke, Thomas, M.D. Paris, Herne-hill.
Goodall, Wm. Preston, L.S.A., Newhall-street, Birmingham.
Lucas, Richard Clement, L.R.C.P. Lond., Hungerford.
Roberts, Charles, L.R.C.P. Edin., York.
Square, William, L.R.C.P. Lond., Plymouth.
Tait, Robt. Lawson, L.R.C.P. & F.R.C.S. Edin., Birmingham.
Welch, Francis Henry, L.S.A., Army, London Hospital.

Seven other candidates were examined but failed to satisfy the Court, and were referred for a period of twelve months further professional study.

Mr. Hulke, F.R.S., will commence his course of lectures on the Minute Anatomy of the Eye, on Monday next, at 4 P.M.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on June 1st:—

Corrie, Alfred Thomas, Plymouth.
Hodges, Frank Henry, Birmingham.
Langdale, Henry Marmaduke, East Hoathly, Sussex.
Magrath, John, Forest-row, East Grinstead.
Maisey, Frederick Thomas, Cheltenham.
Passmore, Frederic George, Brighton.

The following gentlemen also on the same day passed their first professional examination:—

Corneby Austin, University College; George Bland and Francis Edward Jackson, St. Bartholomew's Hospital.

TO-DAY (Friday), at 3 P.M., Professor Huxley will distribute the prizes to the successful candidates at the Charing-cross Hospital.

DR. T. K. CHAMBERS will deliver the Harveian Oration at the Royal College of Physicians, on Wednesday, the 21st inst., at 5 P.M.

HEALTH OF PARIS.—The Hygienic Council of the Department of the Seine have announced that no epidemic prevails in Paris, and that every precaution has been taken for the removal of putrescent substances.

BEQUESTS.—The widow of Mr. Charles Maclaren, sometime editor of the *Scotsman*, has bequeathed £2500 to establish a scholarship, bearing her husband's name, in the University of Edinburgh; £200 to the Royal Infirmary; and £200 to the United Industrial Schools.

THE MEDICAL FACULTY OF STRASBURG. — The lectures of the medical school, after some hesitation, have been resumed, as Dr. Schützenberger, the dean, strove to remove difficulties. The Prussian authorities have signified that, at the present time, the teaching may be carried on in French as heretofore.

NOTRE DAME.—We find in "l'International," of London, that the attempt to destroy this fine and venerable building by fire was frustrated by the courage and perseverance of the house-physicians and house-surgeons of the Hôtel Dieu. These young and meritorious members of our profession obtained, by their resolution and firmness, the assistance of a number of persons, and succeeded in extinguishing the fires.

THE LATE PROFESSOR KUSS, OF STRASBURG.—A subscription has been commenced at Lyons with a view of raising a monument to the memory of Prof. Kuss. It will be remembered that the deceased was one of the most eminent professors of the Medical Faculty of Strasburg; that he was held in great estimation by his colleagues and the inhabitants; and that he died at Bordeaux whilst attending the meetings of the National Assembly, of which he was a distinguished member, broken-hearted by the calamities which had befallen France, and the sufferings which Strasburg had endured during the siege.

ANATOMY AND PHYSIOLOGY AT CAMBRIDGE. — Professor Humphry has given notice that in the ensuing long vacation (July and August), there will be classes for instruction in Practical Anatomy on Tuesdays, Thursdays, and Saturdays, at half-past twelve, commencing July 4th. There will also be classes for instruction in Practical Histology on Wednesdays and Fridays, at half-past twelve, commencing July 5th. This, together with a course of instruction in the Physiological Laboratory, under the direction of Dr. Michael Foster, will constitute a course of Practical Physiology. Gentlemen who have entered to the Anatomical lectures will be at liberty to attend these classes without additional fee.

Medical Appointments.

BRADLEY, C., M.R.C.S.E., has been appointed Medical Officer to the Union Workhouse, Langport, Somersetshire, vice J. Larcombe, M.R.C.S.E., deceased.

BRITTAIN, T., L.R.C.P.Ed., F.R.C.S.E., has been appointed Medical Officer for the North-Eastern District of the Chester Union.

BURNS, Dr. F., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilmeaden Dispensary District of the Waterford Union, vice M. J. Keating, L.K.Q.C.P.I., L.R.C.S.I., resigned.

CALLAWAY, E., M.R.C.S.E., has been appointed Medical Officer for the Tamworth District and the Workhouse of the Tamworth Union.

CUNIHAN, J. F., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Kilrush Dispensary District of the Kilrush Union, Co. Clare; and Medical Attendant to the Royal Irish Constabulary, Kilrush, vice Thomas B. O'Donnell, L.K.Q.C.P.I., M.R.C.S.E., deceased.

EWEN, A. D., M.R.C.S.E., has been appointed Medical Officer for the Tydd District of the Holbeach Union, Lincolnshire, vice W. J. Hodgson, M.D., resigned.

FOWEN, F. W., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Chipping Warden District of the Banbury Union, vice T. Harris, M.R.C.S.E., resigned.

GERALY, J. W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Westport and Louisburgh Dispensary District No. 2 of the Westport Union, Co. Mayo, vice W. Finlay, L.K.Q.C.P.I., L.R.C.S.I., appointed a Surgeon R.N.

HARRISON, Mr. G., has been elected Medical Officer to St. Anne's Royal Asylum, Streatham, vice Mr. G. R. Ord, resigned.

HOYSTED, Dr. J., has appointed Resident Assistant Medical Officer to the Littlemore Pauper Lunatic Asylum, near Oxford, vice J. M. Skelton, M.B., resigned.

HUDDART, Mr. C. H. C., has been appointed Medical Officer for the Aldersbury District of the Atcham Union, Salop.

ILES, D., M.R.C.S.E., has been appointed Medical Officer for the 1st Division of District No. 3 of the Northleach Union, Gloucestershire.

KNOWLES, J., M.R.C.S.E., has been appointed House-Surgeon to the West Kent General Hospital, vice E. Archer, M.R.C.S.E., resigned.

LEIGH, J. T., L.R.C.S.Ed., has been appointed Resident Medical Officer to the North Staffordshire Infirmary, Hartshill, Stoke-upon-Trent, vice J. A. Ross, M.D., L.R.C.S.I., resigned.

LITTLE, J. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Woolton District of the Prescot Union, Lancashire, vice Robt. Rigg, M.R.C.S.E., deceased.

LOUGH, J. J., M.B., L.R.C.S.I., has been appointed Medical Officer for the Ballyjamesduff Dispensary District of the Oldcastle Union, vice A. F. Barnes, M.D., L.R.C.P.Ed., L.R.C.S.I., resigned.

M'LEAN, M., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Bracadale, Isle of Skye, Co. Inverness.

MAHON, H. W., M.D., M.R.C.P.L., F.R.C.S.E., has been appointed Admiralty Surgeon and Agent for Westport, Co. Mayo, vice Thomas H. Burke, L.K.Q.C.P.I., L.R.C.S.I., appointed a Poor-law Medical Inspector.

MAULE, J., M.D., has been appointed Medical Officer and Public Vaccinator for the Parish of Auchtergrarder, Perthshire, vice A. Cochran, M.D., L.F.P. & S. Glas., deceased.

MEADOWS, A., M.D., has been appointed Consulting Physician-Accoucheur to the St. John's-wood and Portland-town Provident Dispensary.

MOLONY, H., L.R.C.P.Ed., L.F.P. & S. Glas., has been appointed Medical Officer for the Workhouse Infirmary, Kilrush Union, vice Thomas B. O'Donnell, L.R.C.P.Ed., L.F.P. & S. Glas., deceased.

NADIN, A. C., L.R.C.P.Ed., has been elected Surgeon to the Sheffield Police Sick Club for the ensuing twelve months.

PLATT, R., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for District No. 2 of the Hawarden Union, Flintshire.

POORE, G. V., M.B., M.R.C.P.L., M.R.C.S.E., has been appointed Registrar to Charing-cross Hospital, vice C. H. Ralfe, L.R.C.P.L., M.R.C.S.E., resigned.

WATSON, W. C., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the North-Western District of the Chester Union.

WEBSTER, H. W., M.R.C.S.E., has been appointed Assistant Medical Officer to the Chorlton Union Workhouse, vice R. W. Goldie, L.R.C.P.Ed., M.R.C.S.E., resigned.

WIMBERLEY, F. W., M.R.C.S.E., has been appointed Medical Officer for the Brinklow District of the Rugby Union.

Births, Marriages, and Deaths.

BIRTHS.

HORN.—On the 3rd inst., at Dalton-in-Furness, the wife of Wm. Horn, L.F.P. & S. Glas., L.S.A., of a daughter.

HUGHES.—On the 29th ult., at College Villa, Brighton, the wife of Dr. R. Hughes, of a son.

MURIEL.—On the 31st ult., at Scotch-street, Whitehaven, the wife of G. J. Muriel, M.R.C.S.E., of a son.

PEIRCE.—On the 31st ult., at Bryn Villa, Brynmawr, the wife of J. E. Peirce, M.R.C.S.E., L.S.A., of a daughter.

SMITH.—On the 1st inst., at Chesbunt, the wife of Wm. Abbotts Smith, M.D., M.R.C.P.L., of Princes-street, Hanover-square, of a son.

MARRIAGES.

COOK—GLADSTONE.—On the 1st inst., at St. John's, Newcastle-on-Tyne, Robert Foreman Cook, M.B., of Gateshead, to Isabella, daughter of Capt. Wm. Gladstone.

SCOBELL—RENDLE.—On the 6th inst., at St. James the Less, Plymouth, Thomas Edward Scobell, M.R.C.S., of Ridgway, Devon, second son of the late Rev. J. S. Scobell, Vicar of St. Kew, Cornwall, to Elizabeth youngest daughter of Edmund Rendle, M.D., of Plymouth.

DEATHS.

DAUNT.—On the 5th inst., at Bath, Wm. Daunt, M.D., H.P. 6th Dragoons, aged 83.

HENNEN.—On the 3rd inst., at Beechholm, Tunbridge Wells, John Hennen, M.D., aged 71.

LUCAS.—On the 29th ult., T. P. Lucas, M.D., of Brecon, aged 69.

MALLETT.—On the 5th inst., Geo. Mallett, F.R.C.S.E., of Silverwell House, Bolton-le-Moors, aged 68.

MURCHISON.—On the 2nd inst., Simon Murchison, M.R.C.S.E., of Bicester, aged 59.

NAZER.—On the 6th inst., Henry Leopold Nazer, M.R.C.S.E., of St. George's-square, late of Cliftonville, Brighton, aged 53.

BOOKS ETC. RECEIVED.

Dr. Bacon on the Writing of the Insane.
Prof. Tyndall on Hours of Exercise in the Alps.
Mr. Penton on the Beginning, its When and its How.
Mr. Wesley on Electricity.
Dr. West on Nervous Disorders.
Dr. von Schmitt on the Curability of Cancer.
Dr. Morell Mackenzie on the Laryngoscope.
Dr. Waring's Manual of Practical Therapeutics.
Mr. Procter on Light Science for Leisure Hours.
Holmes's Surgery. Vol. V.
Dr. Bastian on the Origin of Lowest Organisms.
Mr. Lumley's Medical Officers' Manual.
M. Dubois: Cosmopolitan Cookery.
The Dark Blue. The Veterinarian.
Archives Générales de Médecine.

Medical Diary of the Week.

Monday, June 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Mr. J. W. Hulke, "On the Minute Anatomy of the Eye."

Tuesday, June 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Ballot.—8½ P.M. Mr. Paget, "On the Removal of Tumours from Bones."—Mr. Spencer Wells: "A Fourth Series of 100 Cases of Ovariotomy."

Wednesday, June 14.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Mr. J. W. Hulke, "On the Minute Anatomy of the Eye."
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Guy, "On War in its Sanitary Aspects, with special reference to the period from 1793 to 1815."
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Election of Office-bearers.—Adjourned Discussion on Inspector-General Lawson's paper.

Thursday, June 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.

Friday, June 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND. — 4 P.M. Mr. J. W. Hulke, "On the Minute Anatomy of the Eye."
ROYAL INSTITUTION.—9 P.M. Mr. William Bradford, of New York, "On the Esquimaux and Ice of Greenland," illustrated by Drawings and Photographs.

Saturday, June 17.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

THE PHARMACEUTICAL SOCIETY'S REGISTER.

A CHEMIST AND DRUGGIST at Welchpool, because of some alleged misstatement on his part, had his name removed this year from the Pharmaceutical Society's Register, with the result of his being repeatedly sued in the Welchpool County Court for penalties as an unregistered vendor of drugs. He applied to the Court of Queen's Bench to compel the Society to restore his name, contending that under the Act he had a vested right to be registered, as he had kept an open shop for the selling of medicines for five years. The Court granted a rule *nisi* for a *mandamus* to the Society to compel them to restore the applicant's name to the Register.

R. N. (Denmark-hill) is thanked for his enclosure. There cannot be two opinions as to the character of the proposals in the circular; but those who issue such documents are very wary birds, and not easily trapped. Perhaps the police may be able to do something.

Dr. Abbotts Smith.—We cannot make a practice of returning communications; but we will search for that forwarded by our correspondent, which, when found, shall be left at our Office.

Mr. R. Roberts, (Festiniog.)—The two words are synonymous, the one being of Latin, the other of Greek derivation.

T. L., (Exeter.)—We believe that anyone proposing to practise in France or Italy would, legally, have to obtain a licence to do so.

THE "TRAMP" CLASS.

IN describing the actors in the scenes that make up life among the poorest classes, we are too often treated with pictures and theories of life drawn from the "moral consciousness" of writers. A shrewd curate, gifted with common sense, who possesses sympathy with the poor, has opportunities for studying their character such as do not fall to the lot of other men, unless, perhaps, they be Poor-law medical officers, who generally lack the necessary leisure to describe what they see. The author of "Episodes in an Obscure Life" is evidently a hard-working, sensible, kindly man, and here is what he says of the tramp class. The sketch he gives of an individual member of that fraternity our readers may peruse for themselves. "It is our tramp class," he says, "whom we too often encourage by miscalled 'charity,' because we like to buy a little reputation for benevolence from ourselves or others; cheap, because we are too indolent to make inquiries, or because we want to get rid of the bore of having a disagreeable-looking, brimstone-scented object running beside us on the pavement, or whining or bullying at our doors;—it is our tramps who, *par excellence* (or the lack of it), form the lazily-dishonest species of the awfully large body lumped under the generic head of the London Poor. A professional thief seems almost respectable in comparison with a tramp. The trained thief has a theory that *alienum* is rightfully *suum*, and, to carry his theory into practice, he will expose himself to risk, and sometimes work very hard. The tramp's theory of the universe, on the other hand, is this: that he is to be fed and housed without any trouble to himself. He is ready to steal and riot, when he can do so without much danger; for 'a lark' he will even risk his neck; but, as a rule, he thinks that the less he does, the more society is bound to support him. Sometimes he will not even take the trouble to beg. I have seen tattered tramps lounging in Regent-street on a fine day, with as self-possessed an air as any 'swell' upon the pavement. They had slept the night before in a casual ward; another casual ward was waiting for them; they had managed somehow to get a dinner, and so they were amusing themselves by 'looking at the shops.' A poor man, who genuinely shrinks from observation because of his tatteredness, is one of the most pity-moving sights that can be seen; but this lazy contentment with rags is loathsomely fearful to behold. It is a pungent satire on the philosophy and religion which make a merit of a man's learning to live on as little as he can; although when they have the opportunity of gratifying them, tramps are by no means ascetics in any of their appetites. And yet, despicable as the dirty tramp may seem, sluggishly feeding on society like parasitic vermin, his is a state into which it is far easier for a once self-respecting man to sink and subside than those disposed to despise him might like to believe possible."

BONY ANCHYLOSIS OF THE KNEE-JOINT TREATED BY SUBCUTANEOUS SECTION OF THE BONE.

To the Editor of THE LANCET.

SIR,—Referring to the report in your last impression of a paper with the above title, by L. S. Little, F.R.C.S., read at the last meeting of the Medical and Chirurgical Society, I should be obliged if you would allow me to answer a question which the President, Mr. Curling, stated he wished to ask me had I been present.

Your report states: "Had Mr. William Adams been present, the President would have inquired whether he had heard of Mr. Little's operation on the knee before performing, a year afterwards, a similar operation on the hip-joint."

I regret having been unavoidably absent at the meeting, or I should have been only too glad to have borne testimony to the practical interest and value of the operation performed by Mr. L. S. Little, and described in the paper.

As an answer to the President's question, I may state that I had been informed of Mr. Little's operation by our mutual friend, Dr. Henry Dick; and it was in a conversation with him, and very much at his suggestion, that I first proposed simply to divide the neck of the thigh-bone subcutaneously by a very small saw, instead of using a chisel, to cut through part of the bone, and afterwards break through the remainder by forcible extension, as in the method employed by Mr. Little, and referred to by Dr. Little in "Holmes's System of Surgery," second edition, vol. iii., p. 722, at least presuming this to be the same case as that described at the Medical and Chirurgical Society.

Whilst Mr. Little's operation was admirably adapted to the knee-joint, I thought that an operation attended with much less violence, and of a more perfectly subcutaneous character, might be performed at the hip-joint. The difficulties in the construction of a saw were overcome, after various experiments, by Mr. Blaise; but, still feeling doubtful of the practicability of the operation I proposed, in the event of failure I was fully prepared to adopt the method employed by Mr. Little, and took with me long narrow chisels with oblique cutting edges for this purpose.

In the course of my operation on the neck of the thigh-bone, I found no difficulty in making a simple division by means of the small saw I employed; and therefore it will at once be seen that, in point of practical details, as well as in the essential principle of avoiding all mechanical force in breaking through bone, the operation performed by myself on the hip-joint was essentially different from that performed by Mr. Little on the knee-joint. Indeed, as stated in your report, the author of the paper observed, "for bony anchylosis of the knee-joint subcutaneous osteotomy by means of a saw is impracticable."

In one important respect, however, both operations were similar—i. e., they were both of a subcutaneous character, and, so far as I know, the credit of having first performed a subcutaneous operation of this character in England belongs to Mr. Little, though subcutaneous osteotomy, with various modifications in the operations performed, had been previously practised by Langenbeck, Gross, Bauer, Meyer, and others.

I am, Sir, yours, &c.,

Henrietta-street, June 6th, 1871. WILLIAM ADAMS.

INCOMPETENCE SOMEWHERE.

It is no new thing to find the Poor-law Board rescinding their own acts; but it is not often a case is so glaring as that of the Toxteth Park fever sheds, which were erected at the workhouse to meet the requirements of the epidemics which have lately ravaged Liverpool. The plans of these sheds were, of course, submitted to the authorities at Gwydyr House, and sanctioned by them; but the spread of small-pox to the houses in the neighbourhood has been so marked that, under the pressure of public opinion, an inspector has just recommended their immediate removal. Would it not be desirable to inquire in Parliament who it was that originally permitted their erection?

Inquirer.—The degrees in question are recognised by the Poor-law Board.

SOLDIERS' WIVES.

To the Editor of THE LANCET.

SIR,—I notice a paper, entitled "Medical Notes on Soldiers' Wives," by Francis Hogg, M.D., in your issue of May 20th. The author remarks: "During ten years about 5000 cases of venereal have been treated at the Herbert Hospital. What will become of the children of these men? And yet a number of old women of both sexes are striving to the utmost for the repeal of the Contagious Diseases Acts." This remarkable observation, which is quite irrelevant to the subject of the paper, is apparently inserted as a sort of happy thought with a view of propping the tottering Contagious Diseases Acts.

It is grossly misleading, and therefore I trust you will accord me space to make a few observations on the subject.

The paper refers to women; but as men are specially mentioned, it is evident that we are to infer—1st, that during ten years 5000 men have been treated for venereal disease at the Herbert Hospital; and 2nd, that these diseases will be transmitted to their children. Now, Sir, in the first place, 5000 cases in ten years may represent a comparatively small number of individuals affected. One man may have been under treatment twenty times, and in this way, so far as the returns are concerned, one man is made to do duty for several individuals. Moreover, it is a fact that 75 per cent. of the cases of venereal disease are cases of gonorrhœa; while of the remaining 25, which are cases of sores, 9 out of 10 are non-infecting, and of even less consequence than gonorrhœa. Thus 3 per cent. only suffer from constitutional infection, or are in the least degree likely to transmit the disease if they should have children; but of these forms of venereal disease it is a simple fact that the vast majority are readily and permanently cured, never suffering from relapses themselves, or entailing disease on their offspring. Dr. De Renzy, in his able Report on the Sanitary Administration of the Punjab, remarks on the rarity with which syphilis is transmitted to the offspring of the European soldiers, showing that, of 19,157 sick children of soldiers admitted to hospital during five years, only 16 suffered from any form of venereal disease inherited or acquired. He remarks: "And this, be it remembered, in the case of the children of men who, as a body, are largely tainted with syphilis, and taking it for granted that each admission represents a distinct individual child, which is very unlikely." At the Children's Hospital, Great Ormond-street, of 118,590 children of the poor treated during ten years, only 1½ per cent. were syphilitic. Now, supposing Mr. Hogg's cases represent 5000 men, of these, 150 would suffer from true syphilis, but not more than 5 per cent. of them would so far resist treatment as to endanger their offspring. About 8 men, therefore, in the whole number, shows the total risk incurred, and I think you will agree with me that the percentage is not such as to call for any exceptional legislation, much less for the extremely repugnant measures which are embodied in the Contagious Diseases Acts. Without intending it, Mr. Hogg confirms this view, as he tells us that he only found 3 cases of syphilis among the whole number of soldiers' wives under his care. As many eminent syphilographers declare that the offspring are never infected unless the mother suffers from disease, whatever the state of the male parent, this fact is doubly interesting. I may add that Dr. De Renzy shows that the adoption of these Acts in the Punjab has been attended with an increase of disease among the troops, as also that Landour, Dasshai, and Nowshera—places where these laws have not been adopted,—show the smallest rate of venereal admissions.

Your obedient servant,

June, 1871. C. BELL TAYLOR, M.D., F.R.C.S.E.

Sic Vos non Vobis.—We should still consider the gas to be in the intestine, and not in the peritoneum. Is there any local pain or tenderness? If there is much distress, we would suggest a trial of half-grain doses of opium.

INHALER FOR BICHLORIDE OF METHYLENE.

To the Editor of THE LANCET.

SIR,—Under the above heading in your impression of April 29th, you describe a new anæsthetic instrument, which seems to me peculiarly liable to a defect more or less common to every mode yet used for the administration of vaporous anæsthetics. In few words, the power of that instrument must vary according to the elastic force of the liquid employed, and this elastic force must vary enormously in consequence of the variable character of the temperature and pressure of the atmosphere in this country. In point of fact, an experiment which would be quite free from danger in a humid atmosphere, with the temperature at 60° F., and the barometer at 31 inches, would most likely prove fatal in a dry atmosphere at 80° F. and 29 inches. My objection, it will be seen, is not limited to the particular instrument in question; nor can we ever hope to be altogether free from accident in the administration of vapour-an anæsthetics until due notice is taken of the tension of the vapour existing at the time of the administration. The higher the tension, the greater the amount of air required in the use of the anæsthetic. The simplest mode of ascertaining the tension of vapour for practical purposes would be by what is called "the wet and dry bulb." This instrument consists of two registering thermometers, one of which has its bulb covered with calico or cotton, whilst the other bulb is uncovered. If now we pour a few drops of the anæsthetic upon the covered bulb, the temperature of that bulb will sink, and create a difference in the two bulbs. That difference shows the amount of danger, and must be met by a corresponding increase in the quantity of air employed.

I am, Sir, your obedient servant,

May, 1871. LEWIS THOMPSON, M.R.C.S.

THE INQUEST AT CHURCH.

OUR remarks were made in reference to Mr. James Dearden. We omitted to notice last week that the letter we inserted was from Mr. John Dearden, a gentleman not even alluded to in our notice of the case, and who very oddly complains of being brought prominently before the public.

Delta shall receive an answer next week.

ABSORPTION OF POISONS THROUGH SOUND SKIN.

To the Editor of THE LANCET.

SIR,—Having read in your last impression Mr. Paget's very interesting lecture on the result of corpse poisons absorbed into the living system, and especially the fact which he notices that such poisons are sometimes absorbed through a sound skin, I am induced to mention a circumstance that has twice occurred to myself under the very same condition.

On the first occasion, about six years ago, having made an autopsy on the body of a woman who died of typhus in this asylum, I was seized in the course of twenty-four hours with severe rigors and pain, becoming gradually more excruciating, in the right axilla. There were at the time no signs of any angioleucitis, nor had I any abrasion or lesion of the skin of my hands. The result to me was a severe illness, attended by low fever and the formation of a very large abscess in the axilla, from the effects of which I did not recover for two months.

The second instance occurred two years subsequently. I had examined the body of a female patient, who had died from exhaustion after melancholia, with gangrene of the lungs. I had no injury of any kind to the skin of my hands; but within twelve hours of the post-mortem examination a small angry pustule formed on the back of the right hand, and rapidly increased in size. I continued using the hand, chiefly in writing, for some days, when I was compelled to give up work. A deep abscess formed, attended by much suffering, and the scar I shall carry to the grave.

These two cases were clear and decided proofs of the readiness with which healthy skin can absorb virus. I may, however, add that I was at the time daily undergoing much physical fatigue. Though constantly in the habit of making post-mortem examinations, I have not suffered since.

Yours obediently,

County Asylum, Hanwell, June 5th, 1871. J. HAWKES, M.D.

A Constant Subscriber.—1. The possessor of the qualification mentioned can recover for surgical cases only.—2. A fee can be claimed on the score of the engagement, which is supposed to bind and hinder the obstetrician.—3. If our correspondent is engaged to attend the case, he is entitled to the midwifery fee; if not, and he leaves his house, we apprehend that he can claim a fee for a night visit.

SMALL-POX IN SOUTHAMPTON.

To the Editor of THE LANCET.

SIR,—In your impression of the 3rd instant, under the head of "Small-pox Epidemic," taken from the Registrar-General's Report, it is stated that "a return made to the Sanitary Commission of the town shows that there are 1000 cases in the town out of a population of less than 50,000, besides those in the workhouse."

The actual number of cases existing is 187, including those in the workhouse. These figures are the result of a house-to-house visitation just completed on the recommendation of H.M. Privy Council.

As the statement referred to, if left uncontradicted, is calculated to mislead and unnecessarily alarm the public mind, the guardians trust that you will insert this official denial of its accuracy.

I am, Sir, your obedient servant,

Southampton Workhouse, June 6th, 1871. C. C. SMITH, Clerk.

*** The error complained of is that of the Registrar-General, not our own. —ED. L.

Mr. John Gregory (Rusholme) mistakes the drift of our comments on foreign degrees. We have always entertained and expressed the highest respect for the medical degrees granted by such Universities as those of Paris, Vienna, or Berlin. Our criticism had reference only to the degrees vended or lightly vouchsafed by obscure and less accredited Continental or Transatlantic schools.

Dr. C. F. Moore's letter shall receive attention.

THE PENALTIES OF FASHION.

To the Editor of THE LANCET.

SIR,—When imperious Fashion dictated that ladies should wear "frisettes" in their hair, and by much padding convey the notion that chronic hydrocephalus was epidemic amongst them, no thought, it may confidently be affirmed, was given to any advantage which the naturalist might gain; and yet he is, next to the coiffeur himself, who naturally rises in the world, like a bubble, by capillary attraction, the greatest gainer of them all. He will find few richer hunting grounds than a lady's back hair; and he who wishes to study the habits of the minuter crustacea cannot do better than open out a pad which has been worn for some little time (a process necessary to thoroughly hatch the eggs and develop the larvæ), to be almost invariably rewarded by finding ample store of pediculi in various stages of development. Of course the ingenious barber argues that the *force naturæ* produced existed "in the tangled masses of Newva's hair" before ever she wore a pad; but, alas for our hairdresser, this statement is often like the Communist bulletins, ingenious, but untrue. He thinks, poor foolish man, that the boiling and the baking which the false hair undergoes rid it of all life, ignorant of the power which these ova possess of resisting the most searching influence of the burning fiery furnace.

Is it not time, Sir, that the higher education of women led them to discard a foolish African fashion for a style at once more classical and more cleanly?

Within the last week I have been consulted by three ladies for a very troublesome and irritable irritation on the hairy scalp. In every instance the *fons et origo mali* proved to be pediculi. In each instance the symptoms had first appeared after the purchase of new pads. How is it possible, under such circumstances, to either think or say "De mortuis nil nisi bonum"?

Your obedient servant,

Manchester, May 24th, 1871. S. MESSENGER BRADLEY.

THE RELATIVE PREVALENCE OF SYPHILITIC DISEASE AMONG TROOPS.

WITH the exception of the Household Cavalry, which has always shown, Dr. Balfour tells us, a marked exemption from venereal diseases compared with other arms, the Military Train had the lowest ratio of admissions by syphilis in 1869. This was probably owing to upwards of four-fifths of the corps being quartered at stations where the Contagious Diseases Act was in full operation. The highest ratio of admissions was in the Foot Guards, the excess occurring chiefly in the 1st battalion Coldstream and 3rd battalion Grenadier Guards, while the proportion in the Scots Fusilier Guards did not exceed half that of either of the other two regiments. The difference between the Guard regiments is not easy of explanation, especially as the custom of inspecting men for these diseases is maintained in the Coldstream, while, if we are rightly informed, it has been discontinued in some of the other regiments.

MURPHY ANNUITY FUND.

Second List of Subscriptions received.

	£	s.	d.		£	s.	d.
James Paget, Esq.	25	5	0	Dr. C. H. F. Routh	25	5	0
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Amount of subscriptions to the present time, £261 7s. 6d.

Intending contributors to the Fund are requested to forward their subscriptions to the Treasurer, Dr. Arthur Farre, 12, Hertford-street, May-fair, W.; or to the Union Bank, Regent-street Branch, Argyle-place, W., as the Committee are desirous of closing the account as soon as possible.

X. P.—Consult any respectable surgeon, or let our correspondent take the advice of his usual medical attendant as to the particular surgeon he would recommend.

TWO CASES OF POISONING BY CYANIDE OF POTASSIUM.

To the Editor of THE LANCET.

SIR,—Should you consider them of sufficient value, I shall be glad if you will kindly give space in your journal to the following notes of two cases of accidental poisoning by cyanide of potassium, which have come under my notice within the last few days.

Gunner I——, Royal Artillery, with a view to treating himself and his wife for some slight chronic rheumatic pains from which they suffered, went to a druggist's to procure some iodide of potassium; but was given an ounce of the cyanide instead, half of which quantity he dissolved in about sixteen ounces of water, and took about two ounces of the mixture, giving at the same time a like dose to his wife, and thereby administering about half a drachm of the salt. In less than five minutes after taking the poison, both persons felt ill, the symptoms being giddiness in the head and difficulty of breathing. When I was called in, about five minutes later, the woman was nearly insensible, and suffering from almost complete apnœa, and was rapidly becoming worse; pulse about 72. A solution of carbonate of potash was given as soon as possible, and immediately after it a solution of a mixture of a proto- and a per-salt of iron. Artificial respiration was then had recourse to; the patient was made to inhale ammonia, and cold water was freely applied to the head. This treatment was continued for about half an hour, when the natural respiration was almost restored, and sensibility returned.

The man's symptoms were of a similar character, but not so severe as the woman's, and the treatment pursued was precisely the same.

About an hour and a half after taking the poison both patients might have been considered out of danger of death from its effects.

On the following day the man returned to his duty, and the woman then only complained of giddiness in the head and slight pains in the chest.

I remain, Sir, your obedient servant,
W. F. STEVENSON,
Pigeon House Fort, Dublin, May 30th, 1871. Staff Assistant-Surgeon.

Dr. Arthur Gamgee (Edinburgh) is thanked for the information, which, however, had reached THE LANCET through another correspondent.

Longa est Injuria has omitted to forward his card.

RASH FOLLOWING THE ADMINISTRATION OF PERCHLORIDE OF IRON.

To the Editor of THE LANCET.

SIR,—I wish to ask through your journal if anything can be suggested to obviate the tendency of the perchloride of iron to produce a rash on the skin. I have on several occasions found, when the medicine has been administered continuously for five or six weeks, that the patient has had superficial red patches diffused over the body, and this has terminated in cuticular exfoliation. My patients have invariably described the sensation produced by the disease by saying "it tingles," but it has never assumed the true character of urticaria. The rash disappears in from four to ten days after the iron is discontinued. I ought to say I have seen the rash produced when the medicine has been given in cases of albuminuria, anæmia, pulmonary consumption, gleet, hypertrophy of the heart (combined with digitalis), and other equally distinct diseases; therefore the rash is evidently not connected with the disease the iron is given to remedy. Perhaps this rash has been noticed by others, and a means of obviating it discovered.

I am, Sir, yours obediently,
May 19th, 1871. MARSHALL MONCKTON, L.F.P.S.G.

A CORRESPONDENT is informed that candidates for the Indian medical service require to have a medical and a surgical qualification, and to pass a competitive examination on entrance; after which they proceed to Netley, where, in common with the medical candidates of the British army and navy, they go through the course of instruction afforded at that institution, and are then gazetted as assistant-surgeons. The examinations for the Indian medical service have been discontinued, however, for the present, and we are unable to state when the next one will take place.

THE NEW SYDENHAM SOCIETY: STRICKER AND WUNDERLICH.

To the Editor of THE LANCET.

SIR,—Will you allow me a few lines for criticism of the press-work of these last two volumes of the New Sydenham Society?

Stricker's book is rather for reference than for reading. From the references I have made, both the translator and the compositor appear to have done their duty faithfully.

Wunderlich's book I have read carefully. In almost every respect it is a model of what a translation should be.

1. In difficult or doubtful passages the original is added in parenthesis.
2. Extracts in other languages are translated.
3. Bibliographical references are not translated.
4. Foreign measures are translated into English equivalents.

When it is added to this that the English is good and the press-work accurate, we seem almost to have realised the ideal of a translation. There are, however, some errors which have escaped the editor's observation. Will you kindly again spare your columns for the benefit of the numerous members, who will otherwise have to depend on their own care. I omit mere misprints, &c.

Page 21, note, for "Let it be granted that the," read "There is"; erase "in one"; for "but it is rare indeed," read "and it is rare."
" 48, line 14, for "inasmuch as," read "that."
" 83, note, line 4, erase "other."
" 86, line 25 and others, for "furnaces," read "foci."
" 114, line 13, for "enjoyment," read "drinking."
" 120, line 11, for "over," read "of."
" 134, line 6, for "as full," read "a full."
" 142, note 2, line 2, after "parts," insert "in 1000."
" 154, line 7, erase the second "of."
" 161, heading, for "causes of altered," read "local alterations of."
" 167, line 5, for "1—C," read "1½ C."
" 174, line 21, for "collapse, rigors," read "collapse—rigors."
" 177, line 10, for "3·6° = 5·4°," read "3·6° — 5·4°."
" 181, line 15, for "after," read "and"; line 18, for "involved anger," read "involve danger."
" 183, note, line 4, for "1858," read "1865."
" 186, line 24, for "declination," read "declaration"; last line, for "given period," read "unit."
" 208, line 9, erase "in them."
" 211, line 24, for "respiration," read "respiratory."
" 212, line 7 from foot, "on the other hand" should follow "contrast."
" 252, line 4, for "9° F.," read "9° F."
" 309, line 25, for "predicated," read "predicted."
" 314, line 17, after "temperature," insert "occur."
" 331, line 11, after "C.," insert "(101·84° or 102·56° F.)."
" 335, line 27, for "recurs," read "relapses."
" 341, last line of text, read "(101·3° F.)."
" 343, line 7, read "(101·84° F.)."
" 374, line 28, for "4·66°," read "6·3°."
" 402, line 4, for "prosgnostic," read "prosgonistic."

I am, Sir, yours respectfully,
Stoke Newington, May 26th, 1871. ROBERT H. COOKE.

Mr. John T. Sawyer, (New Orleans.)—We regret that we are unable to comply with our correspondent's request.

Private Patient.—A licence is necessary in order legally to take charge of a person in the state specified.

CHLORAL IN SUPPOSITORIES IN PUERPERAL CONVULSIONS.

To the Editor of THE LANCET.

SIR,—Allow me to record a case of uterine convulsions a quarter of an hour after labour, which lasted four hours, and which, I am sorry to say, came to my lot last week, having had three similar cases since Christmas. I report this case to show the good effects of the hydrate of chloral in suppositories when rejected by the mouth in every form.

Mrs. Jane C——, aged forty, soon after the birth of her seventh child, suffered with severe and constant uterine pains, which induced convulsions of a most fearful class. After all the usual remedies were made use of without any permanent effect, I had recourse to the chloral hydrate suppositories:—Chloral hydrate, one drachm; hard soap, two scruples; honey, sufficient quantity. After using two of the suppositories she had no more convulsions. She had four hours' good sleep, from which she awoke convalescent.

I have thought this case worth recording, as I have now tried it in several cases of uterine pains, with constant sickness, with great success.

Yours truly,
Gorway, Devon, May 15th, 1871. G. F. WHIDBORNE, L.R.C.P.

SKIN-GRAFTING.

To the Editor of THE LANCET.

SIR,—I am not sure that the subject is of sufficient importance to merit any further notice in your pages; but it is perhaps right to point out that the instrument described and figured by me in an article on that subject in the *British Medical Journal* for April 1st, also in my last Half-yearly Clinical Report in the *Glasgow Medical Journal* (published last month), and in both ascribed to the true inventor, M. Mathieu, of Paris, from whom I bought a specimen three years ago, which I have used frequently in public and private practice since. The instrument is a good one, and deserves to be better known.

Your obedient servant,
G. H. B. MACLEOD,
Glasgow, June 6th, 1871. Professor of Surgery, University of Glasgow.

A Constant Subscriber, T. O.—There is nothing in such qualifications to justify the title mentioned. There are only two quarters to which appeal could be of any use. The first is the gentleman himself, who could not defend the practice, and might, on a friendly remonstrance, desist; the the other is the law. The use of the title amounts really to a breach of the 40th clause of the Medical Act. But we could not advise our correspondent to resort to this redress, for the construction of this clause is various and unsatisfactory.

SMALL-POX DURING PREGNANCY.

To the Editor of THE LANCET.

SIR,—I have the pleasure to send you an account of a case of small-pox complicated with pregnancy to add to your list of similar cases if you think proper.

I first saw Mrs. M—— on the 21st ult. A papular eruption had appeared on the previous day. She had fever, with a good deal of pain in lower part of back. The eruption seemed likely to be full, and on inspecting the arms, and finding no scars from vaccination, I expected a severe case. Her husband was warned that abortion would probably result, and accordingly, at one A.M. on the 25th, I was hastily summoned, and found she had been delivered of a fœtus of about five months. There was a good pool of blood with it. Twenty-four hours later she had severe retching, sickness, and pain in the epigastrium, with a very quick pulse and sense of exhaustion. As the child had been dead some little time, I at first feared she had got some putrescent matter into the blood, and that she would sink. However, a mustard poultice to pit of stomach and effervescing medicines seemed to relieve the sickness; she took nourishment and stimulants, and rallied. The eruption at this time was very thick over upper part of body and face, but not passing beyond the vesicular stage, except here and there. I heard later from her mother that vaccination in childhood had been successful, though now no scars were visible.

28th.—Better. From this time the patient improved steadily, and a fortnight after the first appearance of the eruption she left her bed.

I am, Sir, yours obediently,

Acton, May 29th, 1871. THOMAS FRANCIS.

Mr. G. C. Hutt.—Our correspondent would do well to consult Dr. Hassall's work on Food and its Adulterations, published by Longman and Co.

Mr. S. J. Smith is thanked.

ON SUBCUTANEOUS PNEUMATIC ASPIRATION AS A METHOD OF DIAGNOSIS AND OF TREATMENT.

To the Editor of THE LANCET.

SIR,—I beg to report the case of a delicate boy, thirteen years of age, an out-patient of the Chesterfield Hospital, with scrofulous abscess under the right ear, which I have treated successfully by the above method, using the elegant instrument invented by Dr. Georges Dieulafoy, of Paris, and made by Messrs. Weiss and Son. As a pamphlet has been issued explaining the mode of using the instrument, with illustrative cases, it is unnecessary to enter into details. I simply wish to confirm the statements there made, and to recommend it to hospital surgeons and others. In females, where it is especially desirable to avoid cicatrices, the instrument will be found extremely valuable. By its use the introduction of air into abscesses—a frequent source of serious mischief—is avoided. It is said that Dr. Marion Sims has used this method in New York in cases of pelvic abscess and peri-uterine cellulitis with the best effects, and that the bladder, in cases of retention of urine, has been emptied by the aspirator without risk by introducing a small needle above the pubes. It has also been used with great advantage in cases of hydrocephalus and in pleuritic effusions.

I am, Sir, yours faithfully,

Chesterfield, May 23rd, 1871. JOHN ROSE, M.D.

THE communication of *Dr. C. FitzHenry Campbell* (Sackville) shall receive early publicity.

TAYLOR'S PATENT FLAX LINT.

To the Editor of THE LANCET.

SIR,—Having had my attention drawn to an article in your journal of the 13th ult., on "Surgical Dressings," by T. H. Hartleet, M.B., I notice a remark therein that lint is usually prepared from calico instead of linen. This is hardly correct; for although there is a quality of lint made entirely from cotton, I have, together with my father, been a manufacturer of *flax* or linen lint for upwards of twenty years. This lint, most approved by the medical profession, is far superior for all surgical purposes to that made from cotton, as was fully demonstrated at the Pharmaceutical Conference held last autumn in Liverpool. The flax lint manufactured by me, and well known as "Taylor's Patent Super A 1 Flax Lint," contains a very small quantity of cotton; but is so made that the flax fibres only come in contact with the wound, the cotton threads merely forming the back of the material, which is thus rendered lighter and cooler. I also manufacture a pure linen lint, made entirely from flax, known as "Ellesmere No. 2 Lint," which is also very generally used and approved for some purposes.

I am, Sir, yours obediently,

Nuneaton, June 1st, 1871. W. G. TAYLOR, Jun.

VACCINATION IN SHREWSBURY.

To the Editor of THE LANCET.

SIR,—On opening my LANCET on Saturday morning I was astonished to see my name in an extract copied from the *Shrewsbury Chronicle*. I know of the existence of such a paper certainly, but little else. As the county town is eighteen miles distant, the paragraph in question might never have reached my eyes but for your kind attention. If I wished to bring my name before the public, it would not certainly be in the character of a skilful vaccinator. I merely assist my partner in the discharge of his public functions, and as such minister to the wants and fears of babes in arms, adults, &c., on certain days, "not gratis." The wind you speak of blows hot and cold simultaneously. I, for one, would gladly see it veer to some other quarter. Private vaccinators do as well as public ones at these times; and as many people avoid the town, dreading contagion, business of every kind is injured.

I am, Sir, yours truly,

Oswestry, Mon., June, 1871. J. W. BARRINGTON, M.D., &c.

W. C.—The fee is generally paid by the coroner's officer at or within a few days after the inquest.

Dr. F. P. Smith.—Thanks; but we have already received a notice, which is awaiting space for its insertion.

THE PRELIMINARY EXAMINATION AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I beg to call your attention to the shabby way in which the correspondence connected with the preliminary examination in Arts at the Royal College of Surgeons is carried on.

Those individuals who have been unfortunate enough to get "spun" have their feelings soothed by receiving a piece of green cardboard to announce the unpleasant fact, sent open, so that everyone may see it; and all to save a halfpenny!

This may not be of much consequence in towns, where the postman have no time or inclination to read what is written on a post-card. It is quite another thing in villages, where any little bit of news is eagerly snatched up. Here, by the kindness of the postman, assisted by the servants in the kitchen, the inhabitants of the place know Mr. So-and-so has been plucked before Mr. So-and-so knows it himself.

The Chancellor of the Exchequer was asked by Mr. Rylands, in Committee on Thursday last, that each of the candidates for civil service appointments might receive a notice of the result of the examination. Mr. Lowe said that at the Universities the only notice given was the official list, and that anyone might know his fate by referring to it. The College surely might follow this example; or if they did not approve of the method, and find that they cannot afford to do the thing decently for the fee of £2, let them charge £2 0s. 0½d., and I do not think many of the candidates would grumble at the extra.

This is really a serious matter to some; and if calling public attention to it is the means of altering the system, I am sure you will receive the thanks of many "young Sawbones."

I am, Sir, yours, &c.,

June 4th, 1871. CAYENNE.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Acland, Oxford; Prof. Pirrie, Aberdeen; Mr. Wm. Adams; Dr. Forbes Winslow; Prof. Macleod, Glasgow; Dr. Marsh; Mr. Forster; Mr. Muriel, Whitehaven; Mr. Callow; Mr. Walter; Mr. Parker; Mr. Williams; Mr. Shiers; Mr. Blackmore, Teddington; Dr. Cheadle; Mr. Sawyer, New Orleans; Dr. Anderson; Mr. Scott; Mr. Stevenson, Dublin; Mr. Gibson; Mr. Davis; Mr. Smith, Southampton; Dr. Ranke; Mr. Keith; Mr. Stephenson, Edinburgh; Mr. Jenkinson; Mr. Crisp; Dr. Sumpter; Dr. M'Lean, Bracadale; Mr. Eaton; Mr. Atkinson; Mr. J. P. Brown; Mr. Porter; Mr. Wheatley; Dr. Kitchener, Chippenham; Mr. Nasmyth; Mr. G. R. Ord; Mr. Moody; Mr. Shaw; Mr. Eatock; Mr. Beckett; Mr. W. Arthur, Bickley; Dr. Lyle, Exeter; Mr. Lyall; Mr. Morton; Mr. Sheen; Mr. George; Mr. A. Forbes, Glasgow; Mr. Grant, Chesterfield; Mr. Goode, Ware; Mr. Baxter, Stone; Mr. Bamford, Wrexham; Mr. Leoni; Mr. Waters, Chepstow; Dr. Rigden; Dr. Marsden; Mr. Simpson, Lampeter; Mr. Price; Dr. Moore, Dublin; Mr. Soane; Mr. Sinclair; Dr. Beresford, Oswestry; Mr. A. Gamgee, Edinburgh; Mr. Martland, Blackburn; Dr. Abbotts Smith; Mr. E. W. Dugin, Ramsgate; Dr. Kidd; Dr. Hawkes, Hanwell; Dr. Horn, Dalton-in-Furness; Mr. Skeet; Mr. Eynes; Dr. Alexander, Halifax; Dr. Adams, Glasgow; Dr. Broom, Sheffield; Dr. Morris, Stamford-hill; Mr. P. Browne, Odiham; Mr. South; Mr. Field; Mr. Walker, Staines; Mr. Baines, Southampton; Dr. Gregory, Rusholme; Mr. W. Bell, Crewe; Mr. Cross, Market Rasen; Mr. Molony, Quin; Mr. Campbell, Stirling; Mr. Hartshorn, Ironbridge; Mr. Ellerby; Mr. White; Mr. S. J. Smith; Mater; Cayenne; F.R.C.P.; Private Patient; M.A.; Inquirer; R.N.; W. C.; Sic Vos non Vobis; J. H.; M.D.; X. P.; Alpha; T. L.; Medicus, Wrexham; Constant Subscriber; Delta; T. O. M.; F.R.C.S.; &c. &c.

Boston Medical and Surgical Journal, Allahabad Pioneer, Liberal Review, Birmingham Daily Post, Lancaster Observer, School Board Chronicle, Epsomian, Brighton Guardian, Lincolnshire Chronicle, Kilburn Times, Daily Alta California, Naval and Military Gazette, Glasgow Daily Herald, and *Weston-super-Mare Gazette* have been received.

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For 7 lines and under	£0	4	6	For half a page	£2	12	0
For every additional line	0	0	6	For a page	5	0	0

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29, 30, and 31, LONG ACRE.

THE great success that has attended the introduction by Mr. STRONG of these elegant and useful little Carriages has induced some Coach Builders to copy the style of Carriage, without taking the necessary precaution of using only the best materials, which is of the first importance in the manufacture of light Carriages. He has built these Carriages uninterruptedly for twenty-five years, and in order that their quality may be tested,

R. STRONG has adopted the mode of LETTING them for THREE YEARS, after which, WITHOUT FURTHER PAYMENT, the CARRIAGE BECOMES the PROPERTY of the HIRER.

[Extract from the MORNING POST of February 2nd, 1871.]

"AN IMPORTANT IMPROVEMENT IN CARRIAGE CONSTRUCTION.—Numerous accidents of a most deplorable and alarming character have proved beyond a doubt that the use of hickory wood and steel tyres in carriage building is an extremely dangerous practice, and one which, in the interest of public safety, ought to be discarded. It is useful, therefore, to know that Carriages of every description, and Miniature Broughams in particular, of elegant design and first-class workmanship, are now made by Mr. Strong, the well-known Carriage Builder, of Long acre, of well-seasoned English woods, and that many very severe experiments have fully confirmed the superiority of these home materials. Mr. Strong has evidently endeavoured to lead the van of progress in the art of carriage manufacture, and by a happy combination of art and science in his work has certainly succeeded in producing some of the most graceful, durable, and comfortable Broughams and Landaus ever seen. The attainment of extraordinary lightness with great strength, of luxurious ease with remarkable beauty, and, above all, of considerable economy in cost, are matters very interesting to those who watch our national progress in this branch of trade. Few persons who find a really good carriage indispensable can fail to appreciate the attractive improvements mentioned. Mr. Strong offers every facility for the public to avail themselves of these improvements by the three-years purchase system."

STRONG'S CARRIAGE MANUFACTORY, 29 to 31, LONG ACRE.

IMPORTANT NOTICE.—WINDOVER'S EXTRAORDINARY LIGHT AND DURABLE HICKORY AND STEEL CARRIAGES.

VICTORIA BROUGHAM.

Gained Prize Medal, Paris Exhibition, 1867.
Silver Medal, Manchester and Liverpool, 1867.
Silver Medal, Royal Agricultural Show, Southport, 1868.
And Silver Medal at the Horse Show, Islington, 1870.

"Wedmore Lodge, Henley-on-Thames, Nov. 24th, 1869.

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"To Mr. C. S. Windover, Long-acre." "C. H. AMES.

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